# द्वितीयभागः (Part - II)

## (अनिवार्याभिविन्यास-बहुशास्त्रीयपाठ्यक्रमादयः)

# Pool of Compulsory Orientation, Multi-Disciplinary, Skill Enhancement & Value-Added Courses

# Part – II

UNIVERSITY GRANTS COMMISSION

BAHADUR SHAH ZAFAR MARG

NEW DELHI – 110002

## LOCF Committee

**Prof. Shrinivasa Varakhedi**
Chairperson of the committee and Vice-Chancellor, Central Sanskrit University, New Delhi - 110058, ✉ vc@sanskrit.nic.in
**Prof. Sukant Kumar Senapati**
Vice-Chancellor, Shri Somnath Sanskrit University, Veraval, ✉ sukantsnpt@gmail.com
**Prof. Viroopaksha V. Jaddipal**
Secretary, Maharishi Sandipani Rashtriya Ved Vidya Pratishthan, Ujjain,
✉ vvjaddipal@gmail.com
**Dr. M. V. Natesan**
(Retd Prof.) SSV Kaladi, Kailash Nagar Kolazhy, Biyur, Trichur-10,
✉ natesanskt2000@gmail.com
**Dr. Mamta Tripathi**
Assistant Professor, Gargi College, University of Delhi, Delhi, ✉ mamtatripathi.jnu@gmail.com

## Drafting/Compiling/Co-ordinating Committee

**Dr. G. Surya Prasad**
Chief Co-ordinator of the Co-ordination committee and Asst. Professor, Central Sanskrit University, New Delhi – 110058, ✉ dr.gsurya.prasad@csu.co.in
**Dr. Awasthi Sailesh Kumar**
Asst. Professor Grade, Central Sanskrit University, New Delhi – 110058,
✉ dr.awasthisailesh@csu.co.in
**Dr. Kishor Kumar**
Asst. Professor Grade, Central Sanskrit University, New Delhi – 110058,
✉ dr.kishor_kumar@csu.co.in
**Dr. Deepika Dixit**
Asst. Professor Grade, Central Sanskrit University, New Delhi – 110058,
✉ dr.deepikadixit@csu.co.in

# KEY INFORMATION

The **Learning Outcomes-based Curriculum Framework (LOCF)** for **Sanskrit and Sanskrit Shastras** is structured as follows:

1. ***Introduction***
2. ***Part – I (B.A. Hons. (Sanskrit) and various Programs of Sanskrit Shastras)***
3. ***Part – II (Compulsory Orientation courses, Multi-Disciplinary courses etc.)***

- The ***Part - I*** comprise the **Major** and **Minor Courses** specifically aligned with the core discipline for which the LOCF is designed and presented program wise above.
- The ***Part - II*** represented in the present document includes the following components:
  - **Compulsory Orientation Courses - CO**
  - **Multi-Disciplinary Courses (General Discipline) - MD (G)**
  - **Multi-Disciplinary Courses (Sanskrit Discipline) - MD (S)**
  - **Skill Enhancement Courses - SEC**
  - **Value-Added Courses - VAC**

It is important to note that the **numerical identifiers** used in course codes such as **CO, MD (G)**, **MD (S)**, **SEC** and **VAC** represent the **serial order** of the courses and do **not** indicate their **level of difficulty**.

Some MD (G) courses, MD (S) courses, SECs and VACs are taken from Commerce LOCF and B.A. Hons. (Sanskrit) and made some necessary modifications to the courses. The LOCF committee (Sanskrit) acknowledge the same.

In addition to the Multi-Disciplinary Courses listed in this framework, relevant courses from the following disciplines whose LOCFs have already been notified/will be notified by the UGC may also be adopted as **Multi-Disciplinary Courses**:

1. Commerce
2. Political Science
3. Geography
4. Anthropology
5. Chemistry
6. Economics
7. Home Science
8. Mathematics
9. Physical Education
10. Management
11. Law
12. Linguistics
13. Mass Communication
14. History
15. Archeology
16. Defense Studies
17. Physics
18. Public administration
19. Sociology
20. Psychology
21. Philosophy

Additionally, selected **Skill Enhancement Courses (SECs)** and **Value-Added Courses (VACs)** have been translated into **Sanskrit**. The **Sanskrit versions** follow their corresponding **English versions** in this document.

****Note:** *The Syllabus of each course in CO, MD (G), MD (S), SECs, and VACs* ***is presented in a broad format (Lengthy in Nature),*** *providing universities the* ***flexibility*** *to select and adopt units according to their specific requirements. Nevertheless, the cumulative credits must adhere to the prescribed course Credit Framework.*

# Contents

## Compulsory Orientation Courses

The **Learning Outcomes-based Curriculum Framework (LOCF)** in Sanskrit and Sanskrit Śāstras has been designed to ensure that every student entering the program develops a strong foundation in three essential domains: language mastery, knowledge systems, and research skills. These domains are made compulsory as Orientation Courses across all programs. The purpose of these courses is not only to strengthen the academic base but also to align Sanskrit education with the vision of NEP 2020 and the broader goals of Bharatiya Jñāna Paramparā (Indian Knowledge Traditions). The Compulsory Orientation Courses include:

- Two Entry Level **Vyakarana Courses.**
- Three Courses on **Sanskrit Knowledge Systems (SKS)**
- Four Courses on **Research Methodology.**

**1. Vyākaraṇa (Grammar) Courses:**

**Rationale:** Sanskrit grammar is the key to accessing original texts in Vedas, Upaniṣads, Darśanas, Ayurveda, Vyākaraṇa, Nyāya, etc. without systematic training in Vyākaraṇa, engagement with Śāstric literature remains incomplete.

**Compulsory Role in LOCF:** These courses ensure linguistic competence, accuracy of interpretation, and the ability to analyze textual traditions with precision.

**Outcome:** Students acquire Śāstric reading skills, structural understanding of Sanskrit, and confidence in independent interpretation.

**2. Sanskrit Knowledge Systems (SKS) Courses:**

**Rationale:** Sanskrit is the medium of transmission for diverse disciplines of knowledge such as Philosophy (Darśana), Logic (Nyāya), Medicine (Āyurveda), Polity (Arthaśāstra), Architecture (Vāstuśāstra), and Arts (Nāṭyaśāstra). These courses introduce the students the vast repository of SKS.

**Compulsory Role in LOCF:** These courses provide students with a broad orientation to the interdisciplinary richness of Sanskrit texts and their contemporary relevance.

**Outcome:** Learners gain the knowledge of classical Śāstra Traditions.

**3. Research Methodology Courses:**

**Rationale:** Research is central to higher learning. Students must be trained in both traditional Śāstric methods (Anusandhāna, Mimāṁsā, Tarka) and modern research tools (Quantitative, Qualitative, Digital Humanities, Comparative Studies).

**Compulsory Role in LOCF:** Introducing research skills from the very beginning helps students to critically analyze texts, formulate questions, and prepare for advanced academic work or interdisciplinary studies.

**Outcome:** Students develop clarity in academic writing, citation practices, comparative evaluation, and the ability to situate Sanskrit knowledge systems in the global research context.

### Proposed Assessment Pattern for Compulsory Orientation Courses

- The proposed Assessment Framework for B.A. Hons. (Sanskrit) and Sanskrit Shastras is as follows:

**Assessment**

**(a) Evaluation by Semester-end examination -**

1. Answers to Multiple choice questions.
2. Writing answers in one sentence.
3. Short answer questions.
4. Long answer questions.

**(b) Continuous Evaluation -**

The assessment should be based on any four of the following:

1. Participation in workshops.
2. Writing assignments.
3. Producing videos based on the topic of the text.
4. Participation in the Sastra Sanjeevani programme.
5. Presentation of the topic in the Vagvardhini Parishad.

****Note:** The university may modify/add the required changes as per it's needs. It may include Project work/Practical work (Subject wise/Class wise) etc. as the case may be. This Framework is purely proposed in nature.

## Multidisciplinary Courses:

The National Education Policy (NEP) 2020 envisions a transformative approach to higher education in India by fostering multidisciplinary and holistic learning. In this vision, undergraduate education is no longer confined to narrow specializations but is reimagined to cultivate a broad, integrated understanding of knowledge across diverse fields. This is achieved through the development of multidisciplinary undergraduate programmes, which combine the arts, sciences, social sciences, languages and vocational subjects in a flexible curriculum.

Multidisciplinary courses foster holistic development, adaptability, creativity, ethical awareness and lifelong learning skills. They prepare students not just for employment but for meaningful and fulfilling lives as engaged, responsible global citizens.

**Multidisciplinary Courses** are the pool of courses which is meant to provide multidisciplinary or interdisciplinary education to students. GEs shall consist of a pool of courses offered by various disciplines of study (excluding the GEs offered by the parent discipline), in groups of odd and even semesters, from which a student can choose.

**Key Principles**

- Holistic Development: NEP 2020 emphasizes the development of all capacities – intellectual, social, ethical, emotional and physical – by enabling students to explore a broad spectrum of disciplines.
- Flexibility and Choice: Multidisciplinary courses allow students to customize their learning journeys, choosing courses from different domains, thus breaking the silos of traditional disciplines.
- Integration with Vocational and Professional Learning: The National Higher Education Qualifications Framework (NHEQF) integrates vocational and technical education with general higher education, enabling students to acquire skills relevant to emerging work contexts.
- Research and Innovation: NEP promotes critical thinking, creativity and problem-solving by encouraging students to engage in research and cross-disciplinary projects.
- Lifelong Learning and Employability: By broadening the academic horizon, multidisciplinary courses prepare students with 21st-century skills, including adaptability, collaboration and an ethical mindset.

**NEP 2020 Highlights Multidisciplinary Approach**

Establishment of large multidisciplinary universities and colleges, offering flexible curricula and multiple entry/exit options.

- Emphasis on cross-disciplinary and interdisciplinary learning—even professional and technical institutions are encouraged to integrate arts, humanities and social sciences.

- Integration of value-based education, environmental sustainability and global citizenship education within curricula.
- Multiple pathways of learning including direct, distance, online and hybrid/blended modes ensuring inclusivity and lifelong learning.

**Core Benefits for Students**

- Breadth and Depth: Gain knowledge and skills across multiple disciplines, while pursuing depth in one or more fields of interest.
- Enhanced Employability: Broader skill sets and interdisciplinary thinking prepare students for dynamic, real-world challenges.
- Innovative Learning: Exposure to varied fields fosters creative problem-solving and research capabilities.
- Ethical and Social Awareness: Courses integrate humanistic and constitutional values, preparing students for active citizenship and leadership roles.

The Sanskrit LOCF combines multi-disciplinary in a naval way. It includes the various disciplines from general stream of education and Sanskrit stream of education by cutting the disciplinary limits. The Sanskrit LOCF presents the multi-disciplinary courses as follows:

1. **Multi-disciplinary (General Stream) – MD (G)**
2. **Multi-disciplinary (Sanskrit Stream) – MD (S)**

## Proposed Assessment Pattern for Multi-Disciplinary Courses

| Assessment Component | Weightage | Purpose / Focus |
|---|---|---|
| **Theory (60%) Mid/End-Semester Test (Written)** | | |
| MCQs | 10% | Foundational knowledge of Multidisciplinary topics. |
| Writing answers in one sentence. | 10% | Integration of Multidisciplinary learnings. |
| Short answer questions. | 15% | Application of concepts, connection to real-life contexts |
| Long answer questions. | 25% | Critical thinking |

| Practical (40%) | | |
|---|---|---|
| Project work/ Presentations/ Practical assignments. | 20% | Practical application of learnt topics and experiential learning. |
| Group discussions/ Collaborative projects/ Participation in workshops. | 10% | Communication and articulation of taught ideas. |
| Producing videos based on the topic of the text. / Participation in the Sastra Sanjeevani programme. / Presentation of the topic in the Vagvardhini Parishad. | 10% | Active participation to enhance the knowledge received and the application of the same. |

## Skill Enhancement Courses:

The National Education Policy (NEP) 2020 and the National Higher Education Qualifications Framework (NHEQF) emphasize the integration of skill development into undergraduate (UG) education to prepare students for employability, entrepreneurship and lifelong learning. The NEP envisions Skill Enhancement Courses (SECs) as essential, credit-based components of UG programmes that equip students with practical competencies, digital literacy, critical thinking, problem-solving abilities and ethical reasoning.

***Skill Enhancement Course (SEC) as per Credit Framework*:** SEC-s are skill-based courses in all disciplines and are aimed at providing hands-on training, competencies, proficiency and skills to students.

**Key Features:**

- Bridging Theory and Practice: SECs aim to combine disciplinary knowledge with hands-on, experiential learning.
- Flexibility and Choice: NEP 2020 promotes student choice and curricular flexibility, enabling them to pursue SECs tailored to emerging fields (e.g., AI, AR/VR, data analytics, environmental sustainability).
- Employability and Entrepreneurship: SECs are designed to equip students with job-ready skills and nurture an entrepreneurial mindset through project work, internships and community engagement.
- Multiple Entry-Exit Pathways: Consistent with the NHEQF, SECs provide certifications at exit points (e.g., Undergraduate Certificate after Year 1, Diploma after Year 2), ensuring skill validation and progression flexibility.
- Alignment with National Skills Qualifications Framework (NSQF): SECs are harmonized with the NSQF levels, ensuring national recognition and portability of skills qualifications.

These courses encourage students to explore cross-disciplinary skills, breaking down silos between humanities, sciences and vocational education.

**Core Objectives**

1. Enhance Employability: Prepare students with skills and knowledge relevant to the dynamic demands of the workforce.
2. Foster Lifelong Learning: Cultivate a mindset for continuous personal and professional growth.
3. Integrate Values and Ethics: Embed humanistic, ethical and constitutional values into skill development.
4. Promote Innovation and Creativity: Encourage problem-solving, critical thinking and digital proficiency.

**Positioning of Skill Enhancement Courses (SECs)**

Under the NEP 2020 and NHEQF, SECs form a mandatory, flexible and integral component of UG programmes, contributing to:

- Vocationalization of education, ensuring that all graduates are prepared for employment or entrepreneurship.
- Integration with community engagement, aligning skills with real-world societal needs.
- Recognition through academic credits, facilitating transitions to higher levels of education or direct employment.

## Proposed Assessment Pattern for Skill Enhancing Courses

| Assessment Component | Weightage | Purpose / Skill Focus |
|---|---|---|
| **Theory: 40% Weightage** | | |
| Mid-Semester Test (Written) | 15% | Foundational concepts, understanding of theoretical principles |
| End-Semester Test (Written) | 25% | In-depth comprehension, critical analysis, application of theory to practical contexts |
| Key Deliverables: | | Short/long answer questions - Case study analysis - Reflection on skills integrated with theory |

| **Practical: 60% Weightage** | | |
|---|---|---|
| **Assessment Component** | **Weightage** | **Purpose / Skill Focus** |
| Project Work / Capstone Project | 25% | Real-world application, project planning, problem-solving |
| Practical Assignments / Exercises | 20% | Skill application through practical tasks, tool usage, technical demonstrations |
| Viva-Voce / Presentation | 15% | Oral communication, demonstration of skills and understanding of practical work |
| Key Deliverables: | | Prototype/model design - Software/tool-based tasks - Presentations or demonstrations - Portfolio submission (if applicable) |

**Highlights of the Pattern:**

- Ensures balance between theory and practice.
- Promotes hands-on skill development while grounding it in conceptual understanding.
- Suitable for Skill Enhancement Courses in domains like AI, AR/VR, Design, Computational Systems, Digital Humanities, etc.

## Value-Added Courses:

The National Education Policy (NEP) 2020 envisions a holistic, multidisciplinary education system that integrates value-based learning and life skills into the core framework of higher education. Value-Added Courses (VACs) at the undergraduate level are designed to complement disciplinary learning with essential humanistic, ethical, cultural, environmental and employability skills, thus fostering well-rounded, socially responsible and globally aware graduates.

**Key Features:**

- Integration of Human Values and Ethics: NEP 2020 emphasizes the development of constitutional, humanistic, ethical and moral values, encouraging students to embrace truth, righteousness, peace, love, non-violence and global citizenship. VACs cultivate these principles through experiential learning.
- Flexibility and Interdisciplinarity: VACs provide students across disciplines with opportunities to pursue courses in environmental sustainability, cultural heritage, wellness, ethics, communication and community engagement.
- Holistic Development: These courses nurture cognitive, emotional, social and moral dimensions, enabling students to contribute constructively to society.
- Skill Enhancement and Employability: VACs equip students with 21st-century competencies such as communication, collaboration, critical thinking, problem-solving and digital literacy.
- Alignment with NHEQF and NSQF: VACs correspond to the learning outcomes, graduate attributes and skill levels outlined in the NHEQF and NSQF frameworks, ensuring national recognition and credit accumulation.

***Value Addition Course (VAC) as per Credit Framework:*** VAC-s are common pool of courses offered by different disciplines and aimed towards personality building; embedding ethical, cultural values; promote critical thinking, Indian Knowledge Systems, scientific temperament, communication skills, creative writing, presentation skills and Physical education (Yoga) which will help in holistic development of students.

**NEP 2020 Vision**

*NEP 2020 underscores that "all HEIs shall include credit-based courses and projects in areas of community engagement, environmental education, and value-based education". In line with NEP 2020, VACs at the UG level aim to:*

- *"Enable personal accomplishment and enlightenment, constructive public engagement, and productive contribution to society."*
- *"Prepare students for meaningful, satisfying lives and work roles, and enable economic independence."*

**Core Objectives of Value-Added Courses**

1. To instill **ethical reasoning and constitutional values** in students.
2. To foster **environmental stewardship and sustainability awareness**.
3. To cultivate **soft skills** like communication, critical thinking, creativity and teamwork.
4. To integrate **community engagement and service-learning** into the curriculum.
5. To prepare students for **meaningful participation in society** and **global citizenship**.

**Examples of Value-Added Course Themes**

- Environmental Sustainability and Climate Action
- Yoga, Meditation and Wellness
- Ethics, Human Values and Indian Knowledge Systems
- Digital Literacy and Cybersecurity Awareness
- Gender Sensitization and Social Inclusion
- Communication Skills for Professional and Personal Growth
- Cultural Heritage, Art and Aesthetics
- Community Service and Civic Engagement

## Proposed Assessment Pattern for Value-Added Courses

| Assessment Component | Weightage | Purpose / Focus |
|---|---|---|
| **Theory (60%)** | | |
| Mid/End-Semester Test (Written/MCQ) | 25% | Foundational knowledge of value-added topics |
| Reflection Essays / Case Studies | 20% | Critical thinking, integration of value-based learnings |
| Short Assignments / Open-book Tasks | 15% | Application of concepts, connection to real-life contexts |

| **Practical (40%)** | | |
|---|---|---|
| Project / Fieldwork Report | 20% | Practical application of learnt values and experiential learning |
| Presentations / Demonstrations | 10% | Communication and articulation of taught ideas and values |
| Mentor/Peer/Self-assessment & Reflection | 10% | Mentor Feedback/ Peer feedback about the behavioral insights.<br>Self-awareness about the behavioral insights. |

**Ways to assess Values**

| Assessment of Sought after Modifications in Pupils | Assessment Strategies |
|---|---|
| 1. Behavioural Changes | Pre and Post-course self-assessment questionnaires focused on specific behaviors (e.g., collaboration, respect, responsibility) |
| | Reflective journals or logs documenting experiences and behavioral shifts |
| | Peer evaluation and group activity observations during projects or discussions |
| | Instructor observation rubrics during activities assessing participation, cooperation and leadership |
| 2. Attitudinal Changes | Attitude surveys (Likert scale) measuring shifts in outlook (e.g., inclusivity, environmental consciousness, ethics) |
| | Case study analysis requiring students to express opinions and decisions with ethical reasoning |
| | Group discussions and role-plays to observe attitudinal responses in diverse scenarios |
| | Personal growth statements submitted post-course summarizing changes |
| | Attitude surveys (Likert scale) measuring shifts in outlook (e.g., inclusivity, environmental consciousness, ethics) |
| 3. Quality Enhancement | Rubrics for evaluating the quality of submissions (projects, presentations) focusing on depth, clarity, creativity |
| | Progress tracking—comparing initial work with final outcomes to assess learning growth |
| | Viva voce to evaluate comprehension, articulation and integration of values into practical outputs |
| | Community engagement projects with impact reports assessing contribution quality |

**Key Features Aligned with NEP 2020 and Value-Added Learning**

- **Holistic assessment** (intellectual, behavioral and practical skills)
- **Student-centric methods** (reflection, peer/self-assessment)
- **Competency-driven**—focused on knowledge, skills and values development.
- **Flexible for diverse Value-Added Courses** (e.g., Ethics, Environmental Awareness, Cultural Heritage, Yoga, Digital Literacy)

# COMPULSORY ORIENTATION COURSES

श्रेयोऽङ्काः - 4
होराः - 60

## CO 1: व्याकरणप्रवेशः - 1 (लघुसिद्धान्तकौमुद्याः आधारेण)

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. व्याकरणे प्रयुज्यमानानां प्रमुखसञ्ज्ञानां परिज्ञानम्।
2. संहितादिसञ्ज्ञानां परिचयप्रदानम्।
3. सन्धिसूत्राणां सार्थबोधनम्।
4. सन्धियुक्तवाक्यानां विच्छेदसामर्थ्योत्पादनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. व्याकरणे सञ्ज्ञायाः अर्थं प्रयोजनञ्च कथयितुं शक्ष्यन्ति।
2. सन्धि-विच्छेदकरणे दक्षाः भविष्यन्ति।
3. संस्कृतभाषया शुद्धोच्चारणं कर्तुं समर्थाः भविष्यन्ति।
4. सन्धिप्रक्रियासु लोप-गुण-वृद्ध्यादि-आदेशान् वक्तुं प्रभविष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| CO 1 | व्याकरणशास्त्रप्रवेशः - 1 (लघुसिद्धान्तकौमुद्याः आधारेण) | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. सञ्ज्ञाप्रकरणम्।** **श्रेयोऽङ्कः १**

**अन्वितिः २. अच्सन्धिप्रकरणम्।** **श्रेयोऽङ्कः १**

- यण्-सन्धिः
- दीर्घसन्धिः
- अयादिसन्धिः
- गुणसन्धिः
- वृद्धिसन्धिः
- पूर्वरूपसन्धिः
- पररूपसन्धिः

**अन्वितिः ३. हल् सन्धिप्रकरणम्। श्रेयोऽङ्कः १**

- श्चुत्वं - स्तोः श्चुना श्चुः।
- ष्टुत्वं - ष्टुना ष्टुः।
- अनुनासिकम् - यरोऽनुनासिकेऽनुनासिको वा।
- छत्वम् – शश्छोऽटि।
- जश्त्वम् - झलां जशोऽन्ते।
- अनुस्वारः - मोऽनुस्वारः।

**अन्वितिः ४. विसर्गसन्धिप्रकरणम्। श्रेयोऽङ्कः १**

- सत्वम् - विसर्जनीयस्य सः।
- उत्वम् - ससजुषो रुः।
- अतो रोरप्लुतादप्लुते, हशि च।
- लोपः – भोभगोऽघोऽपूर्वस्य योऽशि, हलि सर्वेषाम्, ढ्रलोपे पूर्वस्य दीर्घोऽणः, रो रि।

**निर्धारिताः गन्थाः (Essential/Recommended Readings/Texts)**

1. धरानन्दशास्त्री, *लघुसिद्धान्तकौमुदी*, मूल एवं हिन्दी व्याख्या, दिल्ली।
2. भीमसेनशास्त्री, *लघुसिद्धान्तकौमुदी* भैमी व्याख्या (भाग-1), दिल्ली : भैमीप्रकाशनम्।
3. चारुदेवशास्त्री, *व्याकरणचन्द्रोदयः* (भाग-1, 2 एवं 3), दिल्ली : मोतीलाल बनारसीदास।
4. जि. महाबलेश्वरभट्टः, *सन्धिः*, बैङ्गळुरु : संस्कृतभारती।

**श्रेयोऽङ्काः - 4**
**होराः - 60**

## CO 2: व्याकरणप्रवेशः - 2 (लघुसिद्धान्तकौमुद्याः आधारेण)

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. समासप्रक्रियायाः परिचयप्रदानम्।
2. ग्रन्थेषु समासप्रयोगाणाम् अवबोधनम्।
3. विभक्तीनां ज्ञानेन प्रयोगसामर्थ्योत्पादनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. सामासिकप्रयोगान् वक्तुं समर्थाः भविष्यन्ति।
2. ग्रन्थेषु प्रयुक्तसमासान् निरूपयितुं सिद्धाः भविष्यन्ति।
3. समस्त-व्यस्तपदानां प्रतिपादने समर्थाः भविष्यन्ति।
4. सप्तसु विभक्तीषु वाक्यप्रयोगान् कर्तुं शक्ष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| CO 2 | व्याकरणशास्त्रप्रवेशः - 2 (लघुसिद्धान्तकौमुद्याः आधारेण) | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. विभक्त्यर्थप्रकरणम्।** **श्रेयोऽङ्कः १**

**अन्वितिः २. समासप्रकरणम्।** **श्रेयोऽङ्कः १**

- अव्ययीभावसमासः।
- तत्पुरुषसमासः।
- तत्पुरुषस्य अन्ये भेदाः।
    - विशेषणं विशेष्येण बहुलं, नञ्, नलोपो नञः, तस्मान्नुडचि।

**अन्वितिः ३. समासप्रकरणम्।** **श्रेयोऽङ्कः १**

- बहुव्रीहिसमासः।
- द्वन्द्वसमासः।

**अन्वितिः ४. समासप्रयोगविश्लेषणम्।** **श्रेयोऽङ्कः १**

- स्वशास्त्रसम्बद्धग्रन्थात् प्रतिसमासं न्यूनातिन्यूनं 20 उदाहरणानि।
- प्रसिद्धस्तोत्रेषु विद्यमानसमासप्रयोगाणां विश्लेषणम्।

**निर्धारिताः गन्थाः (Essential/Recommended Readings/Texts)**


1. जि. महाबलेश्वरभट्टः, *सन्धिः*, बैङ्गळुरु : संस्कृतभारती।
2. धरानन्दशास्त्री, *लघुसिद्धान्तकौमुदी*, मूल एवं हिन्दी व्याख्या, दिल्ली।
3. भीमसेनशास्त्री, *लघुसिद्धान्तकौमुदी* भैमी व्याख्या (भाग-1), दिल्ली : भैमीप्रकाशनम्।
4. चारुदेवशास्त्री, *व्याकरणचन्द्रोदयः* (भाग-1, 2 एवं 3), दिल्ली : मोतीलाल बनारसीदास।

श्रेयोऽङ्काः - 4
होराः - 60

## CO 3: संस्कृतज्ञानपरम्परा - १

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयसभ्यतायाः प्राचीनतायाः सनातनत्त्वस्य च अवबोधनम्।
2. अभियान्त्रिकी-प्रौद्योगिकीनां रसशास्त्राणां च ऐतिहासिकविकासस्य अवगमनम्।
3. भारतीयविज्ञानान्तर्गतानां विभिन्नानां वैमानिकशिल्पगणितादिशास्त्राणां परिचयप्रदानम्।
4. आरोग्ये, पर्यावरणे, पारम्परिकचिकित्सासु च भारतीयदृष्टिकोणस्य अवबोधनम्।

**अधिगमस्य परिणामाः(Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. भारतीयसभ्यतायाः प्राचीनतायाः सनातनत्त्वस्य च विषये दृढं प्रतिपादयिष्यन्ति।
2. अभियान्त्रिकी-प्रौद्योगिकीनां रसशास्त्राणां च ऐतिहासिकविकासं वर्णयिष्यन्ति।
3. भारतीयविज्ञानान्तर्गतानां विभिन्नानां वैमानिकशिल्पगणितादिशास्त्राणां परिचयं वदिष्यन्ति।
4. आरोग्ये, पर्यावरणे, पारम्परिकचिकित्सासु च भारतीयदृष्टिकोणं निरूपयिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| CO 3 | संस्कृतज्ञानपरम्परा - १ | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. भारतीयसभ्यतायाः परिचयः।** **श्रेयोऽङ्क १**

- भारतीयसभ्यतायाः सनातनत्वं प्राचीनता च।
- सरस्वती-सिन्धु-सभ्यतायाः ज्ञानम्।
- परम्परागतज्ञानव्यवस्था।

**अन्वितिः २. प्राचीनकाले अभियान्त्रिकी, प्रौद्योगिकी, रसशास्त्रं च।** **श्रेयोऽङ्क १**

- वैदिककाले उत्तर-वैदिककाले पूर्व-हड़प्पासभ्यतायां सिन्धुसभ्यतायां.....
  - अभियान्त्रिकशास्त्रम्।
  - प्रौद्योगिकी समुद्रप्रौद्योगिकी च।
  - चित्ररागाः।

- मृद्भाण्डानि।
- रसायनानि।
- वर्णकानि।
- धातुविज्ञानम्।
- प्रयोगशालाः उपकरणानि च।

**अन्वितिः ३. भारतीयविज्ञानम्।** **श्रेयोऽङ्क १**

- भारतीयभौतिकशास्त्रं पदार्थस्य अवधारणा च।
- वैमानिकशास्त्रम्।
- शिल्पशास्त्रम्।
- छन्दश्शास्त्रम्।
- भारतीयकालगणना।
- सूर्यः, पृथिवी, चन्द्रः, ग्रहणानि च।
- ग्रहाणां परिभ्रमणम्।

**अन्वितिः ४. पर्यावरणम्, आरोग्यं च।** **श्रेयोऽङ्क १**

- वनस्पतिषु जीवविज्ञानम्।
- आयुर्वेदस्य अष्टाङ्गानि।
- आयुर्वेदानुसारं शरीररचनाविज्ञानम्।
- आयुर्वेदानुसारं शरीरक्रियाविज्ञानम्।
- कृषिविज्ञानम्।
- पारिस्थितिकी, पर्यावरणं च।
- योगः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. Filliozat, J. (1964). *The Classical Doctrine of Indian Medicine: Its Origins and Its Greek Parallels.* Delhi: Munshiram Manoharlal.
2. आर्यभटः, (1976), *आर्यभटीयम्* (सं. के. एस. शुक्ल), नई दिल्ली : इंडियन नेशनल साइंस अकादमी।
3. Pingree, D. (1981), *Jyotiḥśāstra*: *Astral and Mathematical Literature*. Wiesbaden: Otto Harrassowitz.

4. Kohle, Pradeep, (2006), *Pride of India - A Glimpse of India's Scientific Heritage*. Samskrit Bharati.
5. आचार्य सुश्रुतः, (2008), *सुश्रुतसंहिता* (सं. यादवशर्मा त्रिवेदी), वाराणसी : चौखम्बा ओरियंटालिया।
6. Soni, Suresh. (2010). *India's Glorious Scientific Tradition*. Ocean Books Pvt. Ltd.
7. Verma, Keshav Dev. (2012). *Physics*. Motilal Banarsidass Publishers.
8. Raha, Sibaji. (2014). *History of Science in India Volume-1, Part-I, Part-II, Volume VIII*. Kolkata: National Academy of Sciences, India and The Ramkrishan Mission Institute of Culture.
9. Mahadevan, B., Bhat, Vinayak Rajat, Nagendra Pavana R.N. (2022). *Introduction To Indian Knowledge System: Concepts and Applications*.
10. Khandelwal, N.M., Chauhan, Pratapsinh. (2023). *Indian Knowledge System (Bhartiya Gyan Parampara)*. Himalaya Publishing House.
11. Ray, Partha Pratim. (2024). *Indian Knowledge Systems*. Rj Mangal Publishers.
12. Dr. Raghuram Bhatta et al. (First ed.). *Learn Samskrit: The Language of Ayurveda (Part III).* New Delhi: Sanskrit Promotion Foundation.
13. Dr. M. Jayaraman et al. (First ed.). *Learn Samskrit: The Language of Yoga (Part IV).* New Delhi: Sanskrit Promotion Foundation.


**सहायकाः ग्रन्थाः (Additional Readings)**


1. द्विवेदी, कपिलदेव, *वैदिकसाहित्य एवं संस्कृति*, वाराणसी : विश्वविद्यालय प्रकाशन।
2. उपाध्याय, बलदेव, *संस्कृत साहित्य का इतिहास*, वाराणसी : शारदा भवन।

**श्रेयोऽङ्काः - 4**
**होराः - 60**

## CO 4: संस्कृतज्ञानपरम्परा - २

### पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)

1. संस्कृतज्ञानपरम्परायाः अवधारणायाः प्रासङ्गिकतायाश्च विषये अवबोधनम्।
2. संस्कृतज्ञानपरम्परायाः आधारभूततत्वानां परिचयः।
3. भारतीयशिक्षायाः स्तम्भत्वेन चतुर्दश-अष्टादशसंख्यकानां वा विद्यास्थानानाम् अवबोधः।
4. प्राचीनभारतीयशिक्षाव्यवस्थानां तत्केन्द्राणाञ्च वैज्ञानिक-दार्शनिक-सामाजिक-योगदानस्य च अन्वेषणम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. संस्कृतज्ञानपरम्परायाः अवधारणां प्रासङ्गिकतां च वर्णयिष्यन्ति।
2. संस्कृतज्ञानपरम्परायाः व्याप्तेः संरचनायाः स्वरूपस्य च परिभाषाकरणं, वर्णनं च कर्तुं शक्ष्यन्ति।
3. चतुर्दश-अष्टादश-विद्यास्थानयोः शाखाः अधिकृत्य वर्णयिष्यन्ति।
4. प्राचीनशिक्षासंस्थानां मूल्याङ्कनं तथा च विविधविषयेषु तेषां योगदानं निरूपयिष्यन्ति।

### श्रेयोऽङ्कप्रारूपम् (Credit Framework)

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| **CO 4** | **संस्कृतज्ञानपरम्परा - २** | **04** | **0** | **0** | **04** |

### पाठ्यक्रमविवरणम् (Details of Course)

**अन्वितिः १. संस्कृतज्ञानपरम्परा।** **श्रेयोऽङ्क १**

- संस्कृतज्ञानपरम्परायाः अवधारणा।
- भारतीयज्ञानपरम्परासंस्कृतज्ञानपरम्परयोः भेदः।
- भारतीयसमाजे संस्कृतज्ञानपरम्परायाः प्रासङ्गिकता।
- वैश्विकपरिप्रेक्ष्ये संस्कृतज्ञानपरम्परायाः औचित्यम्।

**अन्वितिः २. अष्टादशविद्यास्थानानि (प्राचीनभारतीयशिक्षायां ज्ञानस्य अष्टादशशाखाः)** **श्रेयोऽङ्कः १**

- षड्-वेदाङ्गानि (शिक्षा-व्याकरण-निरुक्त-छन्द-ज्योतिष-कल्पाश्च), वेदाङ्गानां विस्तृतसूचना, उद्देश्यं, वैज्ञानिकस्वभावश्च।
- चत्वारः वेदाः (ऋग्वेदः, यजुर्वेदः, सामवेदः, अथर्ववेदः) — तेषां सामान्यवर्णनञ्च।
- चत्वारः उपवेदाः (आयुर्वेदः, धनुर्वेदः, गन्धर्ववेदः, अर्थशास्त्रम्) तेषां सामान्यवर्णनञ्च।

- पुराण-न्याय-मीमांसा-धर्मशास्त्रञ्चेति।
- नानाशास्त्राणां नामानि तेषां सामान्यवर्णनञ्च।

**अन्वितिः ३. अष्टादशपुराणानि।** **श्रेयोऽङ्कः १**

- अष्टादशपुराणानि तेषां सामान्यलक्षणम् (पुराणं पञ्चलक्षणम्) – सर्ग-प्रतिसर्ग-वंश-मन्वन्तर-वंशानुचरितञ्च।
- महापुराण-उपपुराणयोः परिभाषा।
- पौराणिकसृष्टिविज्ञानम्।
- रामायणस्य महाभारतस्य स्मृतीनाञ्च परिचयः।

**अन्वितिः ४. भारतीयदार्शनिकचिन्तनस्य परिचयः।** **श्रेयोऽङ्कः १**

- **आस्तिकदर्शनानि -**
    - साङ्ख्यदर्शनं, योगदर्शनं, न्यायदर्शनं, वैशेषिकदर्शनं, पूर्वमीमांसा, उत्तरमीमांसा चेति।
- **नास्तिकदर्शनानि -**
    - बौद्ध-जैन-चार्वाकदर्शनानि।

**अन्वितिः ५. भारतीयप्राचीनशिक्षणसंस्थानानि।**

- धर्म-अर्थ-समाज-विषये भारतीयशिक्षा।
- गुरुकुलव्यवस्था, नालन्दा-तक्षशिला-विक्रमशिला चेति।
- प्राचीनविश्वविद्यालयानां परिचयः। (वल्लभी, ओदन्तपुरी, मिथिला, काञ्ची, नाडीया, पुष्पगिरी, नागार्जुनकोण्डा, शारदापीठम् (काश्मीरः), उज्जयिनी, जगद्दाला, सोमपुरश्च)
- प्राचीनाचार्याणां सामान्यपरिचयः (लोपामुद्रा। गार्गी। मैत्रेयी। घोषा। अपाला। विश्वम्भरा। अगस्त्यः। वाल्मीकिः। पतञ्जलिः। वेदव्यासः। याज्ञवल्क्यः। बोधायनः। चरकः। सुश्रुतः। जीवकः। नागार्जुनः। कणादः। पतञ्जलिः। कौटिल्यः। पाणिनिः। आर्यभटः। वराहमिहिरः। शङ्कराचार्यः। भास्कराचार्यः। माधवाचार्यादि।)
- भारतात् ज्ञाननिर्यातनम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. उपाध्याय, बलदेव, (1960), *संस्कृत शास्त्रों का इतिहास*, वाराणसी : चौखम्बा संस्कृत सीरीज़।
2. द्विवेदी, कपिलदेव, (1990), *वेदाङ्ग साहित्य का इतिहास*, वाराणसी : विश्वविद्यालय प्रकाशन।
3. Radhakrishnan, S. (1999). *Indian Philosophy* (Vols. 1–2). New Delhi: Oxford University Press.
4. Staal, F. (2008). *Discovering the Vedas: Origins, Mantras, Rituals, Insights*. New Delhi: Penguin Books.
5. पाण्डेय, जनार्दन, (2018), *भारतीय गणित और खगोलशास्त्र*, इलाहाबाद : हिन्दी साहित्य सम्मेलन।
6. V. N. Jha. *Indian Knowledge System: Concepts and Applications*.

7. Ganamoorthi, K., Dwivedi, A. K., & Nayak, L. (First ed.). *Learn Samskrit: The Language of Dharmashastra*. Sanskrit Promotion Foundation.
8. Upadhyaya, V. P., & Mukherjee, A. (First ed.). *Learn Samskrit: The Language of Arthashastra*. Sanskrit Promotion Foundation.
9. विभिन्नपुराणानि, *संस्कृतवाङ्मयस्य इतिहासः*, Dheerendra Nath Vandhopadhyaya, Sanskrit Pustak Bhandar, Kolkata.
10. वेदाङ्गानि, *संस्कृतवाङ्मयस्य इतिहासः*, Dheerendra Nath Vandhopadhyaya, Sanskrit Pustak Bhandar, Kolkata.

**सहायकाः ग्रन्थाः (Additional Readings)**

1. Kohle, Pradeep. (2006). Pride of India- A Glimpse of India's Scientific Heritage Samskrit Bharati.
2. Soni, Suresh. (2010). India's Glorious Scientific Tradition Ocean Books Pvt. Ltd. Vedic.
3. https://sanskritdocuments.org
4. https://bharatiyavidya.indicacademy.org
5. https://iks.iitgn.ac.in

**श्रेयोऽङ्काः - 4**
**होराः - 60**

## CO 5: संस्कृतज्ञानपरम्परा – ३

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. शास्त्रीयसङ्गीत-नृत्य-नाटक-चित्रकलानां समावेशपूर्वकं भारतीयकलायाः विविधपरम्पराणां च विहङ्गावलोकनम्।
2. खगोलशास्त्रेण ऊर्जया भौतिकशास्त्रेण परमाणुसिद्धान्तेन च सम्बद्धानां प्राचीनभारतीयावधारणानां गवेषणम्।
3. गणितशास्त्रे भारतीयविदुषां योगदानं वैश्विकगणितपरम्परायां तेषां प्रभावस्य परिचयप्रदानम्।
4. भारतीयसंख्याप्रणालीनां तथैव शून्यं, Pi, मापनैककाः इत्यादीनां प्रमुखगणितीयसम्प्रत्ययानां व्याख्यानम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. प्रमुखशास्त्रीय-क्षेत्रीय-भारतीयकलायाः रूपाणां परिचयवर्णनयोः च समर्थाः भविष्यन्ति।
2. भारतीयग्रन्थेभ्यः परमाणुगतिः, गुरुत्वाकर्षणसिद्धान्तः, विद्युच्चुम्बकीयविकिरणम् इत्यादिवैज्ञानिकविचाराणां व्याख्यानं करिष्यन्ति।
3. वैश्विकगणितशास्त्रे भारतीयगणितज्ञानां ग्रन्थानां च योगदानं वदिष्यन्ति।
4. भारतीयसंख्याप्रणाल्याः, शून्यं, पाई(Pi), कटपयादी, त्रिकोणमितीयगणना चेत्यादीनाम् अवधारणानां विश्लेषणं करिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| CO 5 | संस्कृतज्ञानपरम्परा - ३ | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course):**

**अन्वितिः १. भारतीयकलानां सामान्यपरिचयः।** **श्रेयोऽङ्कः १**

- चतुःषष्टिकलाः।
- नाट्यशास्त्रम् अभिनयदर्पणञ्च।
- भारतीयशास्त्रीयसंगीतस्य विभिन्नशैल्यः।
- भारतीयशास्त्रीयनृत्यशैल्यः।
- चित्रकलानां चित्रीकरणस्य भिन्नक्षेत्रीयशैल्यः।

**अन्वितिः २. भारतीयविज्ञानम्।** **श्रेयोऽङ्कः १**

- पुरातनखगोलविद्या (Archeoastronomy)
- भारतीयखगोलविज्ञानस्य परिचयः इतिहासश्च।
- उपनिषत्सु अविनाशी-ऊर्जायाः विज्ञानम्।
- अग्निना परमाणुगतिः।
- विद्युच्चुम्बकीयतरंगस्य विज्ञानम्।
- विद्युच्चुम्बकीयविकिरणानि।
- विद्युतः प्रकाशस्य वेगः च।
- गतिनियमाः।
- आकर्षणस्य सिद्धान्तः।
- गुरुत्वाकर्षणसिद्धान्तः।

**अन्वितिः ३. भारतीयगणितम्।** **श्रेयोऽङ्कः १**

- भारतीयगणितीयविज्ञानस्य इतिहासः।
- गणितक्षेत्रे भारतीयानां योगदानम्।
- प्रमुखगणितीयग्रन्थानां परिचयः।
- भारतीयगणितीयविज्ञानस्य भारतीयगणितसिद्धान्तानां च वैश्विकप्रभावः।

**अन्वितिः ४. भारतीयगणितम्।** **श्रेयोऽङ्कः १**

- भारतीयसंख्याप्रणाली।
- कटपयादिसूत्रम्।
- शून्यस्य अवधारणा।
- भू-मापनस्य एककाः।
- pi (π) मूल्यस्य गणनायां भारतीयावधारणाः।
- पायथागोरससूत्रं, वैदिकगणितं च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. भरतमुनिः, (1951), *नाट्यशास्त्रम्* (अनुवादः Ghosh, M.), कोलकाता : Asiatic Society.
2. Ghosh, Manomohan, (1951), *The Nāṭyaśāstra: A Treatise on Hindu Dramaturgy and Histrionics*, Calcutta: Asiatic Society.

3. उपाध्याय, बलदेव, (1960), *संस्कृत शास्त्रों का इतिहास*, वाराणसी : चौखम्बा संस्कृत सीरीज़।
4. Sarma, K. V., (1997), *A History of the Kerala School of Hindu Astronomy*, New Delhi: Vedic Books.
5. मिश्र, सत्यव्रत, (2001), *भारतीय दर्शन का इतिहास*, दिल्ली : मोतीलाल बनारसीदास।
6. शास्त्री, हरिदत्त, (2010), *भारतीय विज्ञान की परम्परा*, वाराणसी : ज्ञानमण्डल।
7. देवर्षिः अगस्त्यः, (2020 पुनर्मुद्रण), *सूर्यसिद्धान्तः*, संस्कृत प्रमोशन फाउंडेशन।
8. Mishra, R., & Agustya, D., *Suryasiddhāntaḥ (Madhyamādhikāraḥ)*, Sanskrit Promotion Foundation.
9. Shrinivasan, M. D., et al., *Bhāratīya Gaṇita Paramparā (Part I)*, Sanskrit Promotion Foundation.
10. डॉ. पी.वी. शर्मा, *आयुर्वेद के शास्त्रीय ग्रन्थ।*
11. डी. एस. कोठारी, *विज्ञान एवं भारतीय परम्परा।*
12. ए. एल. बशम, *The Wonder That Was India.*
13. भरतमुनिः, *नाट्यशास्त्रम्।*
14. नन्दिकेश्वरः, *अभिनयदर्पणः।*
15. आर्यभट्टः, *आर्यभट्टीयम्।*
16. *सूर्यसिद्धान्तः* (Trans. S.B. Dixit)
17. देवर्षिः अगस्त्यः, *गोलपरिभाषा (The Language of Jyotiṣa)*, संस्कृत प्रमोशन फाउंडेशन।

**सहायकाः ग्रन्थाः (Additional Readings)**

1. https://sanskritdocuments.org
2. https://indianculture.gov.in
3. https://iks.iitgn.ac.in
4. https://bharatiyavidya.indicacademy.org

श्रेयोऽङ्काः - 4
होराः - 60

## CO 6: गुणात्मक-मात्रात्मकशोधयोः तत्त्वानि

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. गुणात्मकशोधस्य उद्देश्यानाम् आवश्यकतानां विधीनां च परिचयः।
2. मात्रात्मकशोधस्य उद्देश्यानाम् आवश्यकतानां विधीनां च परिचयः।
3. गुणात्मकशोधे आधुनिकप्रवृत्तीनां विषये बोधः।
4. मात्रात्मकशोधे आधुनिकप्रवृत्तीनां विषये बोधः।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. गुणात्मकशोधस्य उद्देश्यानि आवश्यकताः विधीन् च परिभाषयितुं शक्ष्यन्ति।
2. मात्रात्मकशोधस्य उद्देश्यानि आवश्यकताः विधीन् च परिभाषयितुं शक्ष्यन्ति।
3. गुणात्मकशोधस्य आधुनिकप्रवृत्तीनां विषये वर्णयिष्यन्ति।
4. मात्रात्मकशोधस्य आधुनिकप्रवृत्तीनां विषये वर्णयिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| **CO 6** | **गुणात्मक-मात्रात्मकशोधयोः तत्त्वानि** | **04** | **0** | **0** | **04** |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. गुणात्मकशोधः।** **श्रेयोऽङ्कः १**

- उद्देश्यानि, आवश्यकता च
- विधयः -
  - दार्शनिकविधिः।
  - ऐतिहासिकविधिः।
  - प्रजातिकविधिः।
  - व्यक्तिवृत्ताध्ययनम्।
  - विकासात्मकाध्ययनम्।

**अन्वितिः २. मात्रात्मकशोधः।** **श्रेयोऽङ्कः १**

- उद्देश्यानि आवश्यकता च।
- विधयः -
    - प्रायोगिकविधिः।
    - घटनोत्तरशोधविधिः।
    - सर्वेक्षणशोधविधिः।

**अन्वितिः ३. गुणात्मकशोधे आधुनिकप्रवृत्तयः।** **श्रेयोऽङ्कः १**

- कथात्मकपृच्छा।
- आधारसामग्रीविश्लेषणम्।
- केन्द्रितसमूहचर्चा।
- प्रघटनाशास्त्रम्।
- प्रतीकात्मक-अन्ताक्रियावादः।

**अन्वितिः ४. मात्रात्मकशोधे आधुनिकप्रवृत्तयः।** **श्रेयोऽङ्कः १**

- सांख्यिकीय-तन्त्रांशप्रयोगः - SPSS, R, Python इत्यादीनां साहाय्येन द्रुतं विश्लेषणम्।
- सद्यस्कसर्वेक्षणम् - Google Forms, Qualtrics इत्यादिभिः माध्यमैः दत्तांशसङ्ग्रहणस्य सौलभ्यम्।
- बृहद्दत्तांश-विश्लेषणम् (Big Data Analytics) - महद्दत्तांशस्य विश्लेषणं, प्रवृत्तिपरिचयः च।
- कृत्रिमबुद्धिमत्तायन्त्राध्ययनयोः प्रयोगः - प्रतिरूपनिर्माणं, स्वचालितदत्तांश-विश्लेषणम्।
- मिश्रितपद्धतयः (Mixed Methods) - शोधे गुणात्मकमात्रात्मकयोः समन्वयः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. त्रिपाठी, एल. बी., & भार्गव, हरप्रसाद, (1990), *मनोवैज्ञानिक अनुसंधान पद्धति*, उ.प्र. : विनोद पुस्तक मन्दिर, आगरा।
2. गुप्ता, एस. पी., (1998), *शिक्षा में सांख्यिकी*, उ.प्र. : शारदा पुस्तक भवन, इलाहाबाद।
3. गुप्ता, एस. पी., (2000), *अनुसंधान संदर्शिका*, उ.प्र. : शारदा पुस्तक भवन, इलाहाबाद।
4. भटनागर, ए. बी., (2002), *शिक्षा अनुसंधान की कार्यप्रणाली*, उ.प्र. : आर. लाल बुक डिपो, मेरठ।
5. जैन, कृष्णा, (2013), *तर्कशास्त्र - एक रूपरेखा*, नई दिल्ली : डी. के. प्रिन्टवर्ल्ड।
6. ओलियरी, जि., (2020), *रिसर्च प्रोजेक्ट करने के लिए आवश्यक मार्गदर्शन*, नई दिल्ली : सेज प्रकाशन।
7. डेनिकोलो, पैम., & वेकर, सिंडा, (2020), *शोध प्रस्ताव कैसे करें तैयार*, नई दिल्ली : सेज प्रकाशन।

8. फ्रेडरिक, & कूलिज, (2020), *सांख्यिकी*, नई दिल्ली : सेज प्रकाशन।
9. मूर्ति, वासुदेव, (2020), *प्रभावी प्रस्ताव लेखन*, नई दिल्ली : सेज प्रकाशन।
10. Garett, H. E. (1982). *Statistics in Psychology and Education*. Bombay: Vakils, Fafer & Simons Pvt.
11. Kothari, C. R. (1985). *Research Methodology: Methods and Techniques*. New Delhi: Wiley Eastern Ltd.
12. Guilford, J. P., & Fruchter, B. (1987). *Fundamental Statistics in Psychology & Education*. New York: McGraw Hill.
13. Keeves, J. P. (1997). *Educational Research Methodology and Measurement: International Handbook*. Pergamon Press.
14. Best, J. W. (2000). *Research in Education*. New Delhi: Prentice Hall Inc.
15. Kerlinger, F. N. (2000). *Foundations of Behavioral Research*. New Delhi: Surjeet Publications.
16. Dawson, C. (2002). *Practical Research Methodology*. New Delhi: UBS Publication Distributors.
17. Kumar, R. (2005). *Research Methodology: A Step-by-Step Guide for Beginners*. Singapore: Pearson Education.
18. Pandey, K. P. (2005). *Fundamentals of Educational Research*. Varanasi: Vishwavidyalaya Prakashan.
19. Oliver, P. (2005). *Writing Your Thesis*. New Delhi: Vistaar Publications.
20. Sansanwal, D. N. (2020). *Research Methodology and Applied Statistics*. New Delhi: Shipra Publications.

श्रेयोऽङ्काः - 4
होराः - 60

## CO 7: शोधस्य प्रमाणमीमांसा तर्कशास्त्रम् उपकरणानि च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. शोधस्य प्रमाणमीमांसायाम् अनुमानप्रमाणस्य परिचयप्रकाराणाञ्च बोधः।
2. शोधस्य तर्कशास्त्रविषयकाभिज्ञानम्।
3. शोधस्य विविधोपकरणानां परिचयः।
4. शोधस्य विविधोपकरणानां निर्माणप्रक्रियायाः ज्ञापनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. शोधस्य प्रमाणमीमांसायाम् अनुमानप्रमाणस्य परिचयप्रकाराणाञ्च वर्णनं करिष्यन्ति।
2. शोधस्य तर्कशास्त्रविषयकं परिचयं विधास्यन्ति।
3. शोधस्य विविधोपकरणानां परिचयं वक्ष्यन्ति।
4. शोधस्य विविधोपकरणानां निर्माणं करिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| CO 7 | शोधस्य प्रमाणमीमांसा तर्कशास्त्रम् उपकरणानि च। | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. अनुमानप्रमाणम्।** **श्रेयोऽङ्कः १**

- स्वार्थानुमानम्।
- परार्थानुमानम्।
- पूर्ववत्।
- शेषवत्।
- सामान्यतोदृष्टम्।
- उपमानप्रमाणम्।
- शब्दप्रमाणञ्च।

**अन्वितिः २. तर्कशास्त्रम्।** **श्रेयोऽङ्कः १**

- पाश्चात्त्यतर्कशास्त्रम् - अरिष्टोटल्, जॉर्ज बूल् च।
- भारतीयतर्कपद्धत्याः पाश्चात्त्यतर्कपद्धत्या सह तुलनात्मकाध्ययनम्।

**अन्वितिः ३. शोधोपकरणानि।** **श्रेयोऽङ्कः १**

- प्रश्नावली।
- अनुसूची।
- साक्षात्कारः।
- निरीक्षणम्।
- अभिरुचिमापनी।
- मनोवैज्ञानिकपरीक्षणानि।
- परियोजनाविधयश्चेति।

**अन्वितिः ४. शोधोपकरणनिर्माणम्।** **श्रेयोऽङ्कः १**

- शोधोपकरणस्य सम्प्रत्ययः, आवश्यकताः, विशेषताश्च।
  - वैधता - सम्प्रत्ययः, प्रकाराः (विषयवस्तुवैधता, समवर्तिवैधता, संरचनावैधता च) वैधतानिर्धारणप्रक्रिया च।
  - विश्वसनीयता – सम्प्रत्ययः, आवश्यकता, विश्वसनीयतानिर्धारणविधयः।
  - मानकानि - सम्प्रत्ययः, आवश्यकता, निर्धारणप्रक्रिया।
  - वस्तुनिष्ठता - सम्प्रत्ययः, आवश्यकता, निर्धारणम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. त्रिपाठी, एल. बी., & भार्गव, हरप्रसाद, (1990), *मनोवैज्ञानिक अनुसंधान पद्धति*, उ.प्र. : विनोद पुस्तक मन्दिर, आगरा।
2. गुप्ता, एस. पी., (1998), *शिक्षा में सांख्यिकी*, उ.प्र. : शारदा पुस्तक भवन, इलाहाबाद।
3. गुप्ता, एस. पी., (2000), *अनुसंधान संदर्शिका*, उ.प्र. : शारदा पुस्तक भवन, इलाहाबाद।
4. भटनागर, ए. बी., (2002), *शिक्षा अनुसंधान की कार्यप्रणाली*, उ.प्र. : आर. लाल बुक डिपो, मेरठ।
5. जैन, कृष्णा, (2013), *तर्कशास्त्र - एक रूपरेखा*, नई दिल्ली : डी. के. प्रिन्टवर्ल्ड।
6. ओलियरी, जि., (2020), *रिसर्च प्रोजेक्ट करने के लिए आवश्यक मार्गदर्शन*, नई दिल्ली : सेज प्रकाशन।
7. डेनिकोलो, पैम., & वेकर, सिंडा, (2020), *शोध प्रस्ताव कैसे करें तैयार*, नई दिल्ली : सेज प्रकाशन।
8. फ्रेडरिक, & कूलिज, (2020), *सांख्यिकी*, नई दिल्ली : सेज प्रकाशन।

9. मूर्ति, वासुदेव, (2020), *प्रभावी प्रस्ताव लेखन*, नई दिल्ली : सेज प्रकाशन।
10. Garett, H. E. (1982). *Statistics in Psychology and Education*. Bombay: Vakils, Fafer & Simons Pvt.
11. Kothari, C. R. (1985). *Research Methodology: Methods and Techniques*. New Delhi: Wiley Eastern Ltd.
12. Guilford, J. P., & Fruchter, B. (1987). *Fundamental Statistics in Psychology & Education*. New York: McGraw Hill.
13. Keeves, J. P. (1997). *Educational Research Methodology and Measurement: International Handbook*. Pergamon Press.
14. Best, J. W. (2000). *Research in Education*. New Delhi: Prentice Hall Inc.
15. Kerlinger, F. N. (2000). *Foundations of Behavioral Research*. New Delhi: Surjeet Publications.
16. Dawson, C. (2002). *Practical Research Methodology*. New Delhi: UBS Publication Distributors.
17. Kumar, R. (2005). *Research Methodology: A Step-by-Step Guide for Beginners*. Singapore: Pearson Education.
18. Pandey, K. P. (2005). *Fundamentals of Educational Research*. Varanasi: Vishwavidyalaya Prakashan.
19. Oliver, P. (2005). *Writing Your Thesis*. New Delhi: Vistaar Publications.
20. Sansanwal, D. N. (2020). *Research Methodology and Applied Statistics*. New Delhi: Shipra Publications.

श्रेयोऽङ्काः - 4
होराः - 60

## CO 8: दत्तांशसङ्ग्रहणविश्लेषणविधयः

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. दत्तांशसङ्कलनस्य प्रक्रियायाः बोधः।
2. शोधे त्रिभुजीकरणप्रक्रियायाः परिचयः।
3. प्रदत्तानां विश्लेषणस्य परिचयात्मकावबोधः।
4. दत्तांशानां वर्गीकरणस्य प्रकाराणां विधीनां च परिचयः।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. दत्तांशसङ्कलनस्य प्रक्रियायाः विषये वक्ष्यन्ति।
2. शोधे त्रिभुजीकरणप्रक्रियायाः परिचयात्मकवर्णनं करिष्यन्ति।
3. प्रदत्तानां विश्लेषणस्य प्रक्रियायाः प्रकाराणाञ्च निरूपणं करिष्यन्ति।
4. दत्तांशानां वर्गीकरणस्य प्रकाराणां विधीनां च व्याख्यां विधास्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| CO 8 | दत्तांशसङ्ग्रहण-विश्लेषणविधयः | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. दत्तांशस्य सङ्कलनम्।** **श्रेयोऽङ्कः १**

- गुणात्मकदत्तांशस्य सङ्ग्रहणप्रक्रिया।
- मात्रात्मकदत्तांशस्य सङ्ग्रहणप्रक्रिया।

**अन्वितिः २. त्रिभुजीकरणम्।** **श्रेयोऽङ्कः १**

- विध्याश्रितत्रिभुजीकरणम्। (Methodological Triangulation)
- दत्तांशत्रिभुजीकरणम्। (Data Triangulation)
- सैद्धान्तिकत्रिभुजीकरणम्। (Theoretical Triangulation)

**अन्वितिः ३. प्रदत्तविश्लेषणम्।** **श्रेयोऽङ्कः १**

- आवश्यकता।
- वर्णनात्मकम् अनुमानपरकं विश्लेषणम्।

**अन्वितिः ४. दत्तांशवर्गीकरणम्।** **श्रेयोऽङ्कः १**

- गुणात्मकं वर्गीकरणम्।
- मात्रात्मकं वर्गीकरणम्।
- मिश्रितविध्यनुरूपं वर्गीकरणम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. त्रिपाठी, एल. बी., & भार्गव, हरप्रसाद, (1990), *मनोवैज्ञानिक अनुसंधान पद्धति*, उ.प्र. : विनोद पुस्तक मन्दिर, आगरा।
2. गुप्ता, एस. पी., (1998), *शिक्षा में सांख्यिकी*, उ.प्र. : शारदा पुस्तक भवन, इलाहाबाद।
3. गुप्ता, एस. पी., (2000), *अनुसंधान संदर्शिका*, उ.प्र. : शारदा पुस्तक भवन, इलाहाबाद।
4. भटनागर, ए. बी., (2002), *शिक्षा अनुसंधान की कार्यप्रणाली*, उ.प्र. : आर. लाल बुक डिपो, मेरठ।
5. जैन, कृष्णा, (2013), *तर्कशास्त्र - एक रूपरेखा*, नई दिल्ली : डी. के. प्रिन्टवर्ल्ड।
6. ओलियरी, जि., (2020), *रिसर्च प्रोजेक्ट करने के लिए आवश्यक मार्गदर्शन*, नई दिल्ली : सेज प्रकाशन।
7. डेनिकोलो, पैम., & वेकर, सिंडा, (2020), *शोध प्रस्ताव कैसे करें तैयार*, नई दिल्ली : सेज प्रकाशन।
8. फ्रेडरिक, & कूलिज, (2020), *सांख्यिकी*, नई दिल्ली : सेज प्रकाशन।
9. मूर्ति, वासुदेव, (2020), *प्रभावी प्रस्ताव लेखन*, नई दिल्ली : सेज प्रकाशन।
10. Garett, H. E. (1982). *Statistics in Psychology and Education*. Bombay: Vakils, Fafer & Simons Pvt.
11. Kothari, C. R. (1985). *Research Methodology: Methods and Techniques*. New Delhi: Wiley Eastern Ltd.
12. Guilford, J. P., & Fruchter, B. (1987). *Fundamental Statistics in Psychology & Education*. New York: McGraw Hill.
13. Keeves, J. P. (1997). *Educational Research Methodology and Measurement: International Handbook*. Pergamon Press.
14. Best, J. W. (2000). *Research in Education*. New Delhi: Prentice Hall Inc.
15. Kerlinger, F. N. (2000). *Foundations of Behavioral Research*. New Delhi: Surjeet Publications.
16. Dawson, C. (2002). *Practical Research Methodology*. New Delhi: UBS Publication Distributors.

17. Kumar, R. (2005). *Research Methodology: A Step-by-Step Guide for Beginners*. Singapore: Pearson Education.
18. Pandey, K. P. (2005). *Fundamentals of Educational Research*. Varanasi: Vishwavidyalaya Prakashan.
19. Oliver, P. (2005). *Writing Your Thesis*. New Delhi: Vistaar Publications.
20. Sansanwal, D. N. (2020). *Research Methodology and Applied Statistics*. New Delhi: Shipra Publications.

श्रेयोऽङ्काः - 4
होराः - 60

## CO 9: शोधे साङ्ख्यिकीयविश्लेषणविधयः

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. अनुसन्धाने साङ्खिक्याः महत्त्वविषये अभिज्ञानम्।
2. अनुसन्धाने साङ्खिकीयविधीनां परिचयः।
3. अनुसन्धाने मापन्याः प्रकाराणाम् अवबोधः।
4. अनुसन्धाने दत्तांशविश्लेषणाय प्राक्कल्पनापरीक्षणस्य तन्त्रांशप्रयोगस्य परिचयः।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. अनुसन्धाने साङ्खिक्याः महत्त्वविषये वक्ष्यन्ति।
2. अनुसन्धाने साङ्खिकीयविधीनां परिचयं वक्तुं प्रभविष्यन्ति।
3. अनुसन्धाने मापन्याः प्रकारान् भेदपुरस्सरं वर्णयिष्यन्ति।
4. अनुसन्धाने दत्तांशविश्लेषणाय प्राक्कल्पनापरीक्षणस्य तन्त्रांशप्रयोगस्य प्रक्रियां सोपानानुगुणं प्रतिपादयिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| CO 9 | शोधे साङ्ख्यिकीय-विश्लेषणविधयः | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. अनुसन्धाने साङ्ख्यिक्याः महत्त्वम्।** **श्रेयोऽङ्कः १**

- परिचयः।
- आवश्यकता।
- प्रकाराः –
    - वर्णनात्मक सांख्यिकी (Descriptive Statistics)
    - अनुमानात्मक सांख्यिकी (Inferential Statistics)

**अन्वितिः २. अनुसन्धाने साङ्ख्यिकीयविधयः।** **श्रेयोऽङ्कः १**

- प्राचलिकविधयः -

- t-परीक्षणम्।
- ANOVA-परीक्षणम्।
- पीयरसन् सहसम्बन्धगुणाङ्कः।

- अप्राचलिकविधयः -
  - काई-स्क्वायर्।
  - स्पीयरमैनसहसम्बन्धः।
  - मान-व्हिटनी 'U' परीक्षणम्।

**अन्वितिः ३. अनुसन्धाने मापनीप्रकाराः।** **श्रेयोऽङ्कः १**

- नामितामापनी।
- क्रमिकामापनी।
- आन्तरालात्मिकीमापनी।
- आनुपातिकीमापनी।

**अन्वितिः ४. अनुसन्धाने दत्तांशविश्लेषणम्।** **श्रेयोऽङ्कः १**

- प्राक्कल्पनापरीक्षणम् -
  - सार्थकतास्तराः।
  - त्रुटिद्वयम् (Type I & II)
- SPSS तन्त्रांशः।
  - परिचयः।
  - आरेखीयप्रस्तुतीकरणञ्च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. त्रिपाठी, एल. बी., & भार्गव, हरप्रसाद, (1990), *मनोवैज्ञानिक अनुसंधान पद्धति*, उ.प्र. : विनोद पुस्तक मन्दिर, आगरा।
2. गुप्ता, एस. पी., (1998), *शिक्षा में सांख्यिकी*, उ.प्र. : शारदा पुस्तक भवन, इलाहाबाद।
3. गुप्ता, एस. पी., (2000), *अनुसंधान संदर्शिका*, उ.प्र. : शारदा पुस्तक भवन, इलाहाबाद।
4. भटनागर, ए. बी., (2002), *शिक्षा अनुसंधान की कार्यप्रणाली*, उ.प्र. : आर. लाल बुक डिपो, मेरठ।
5. जैन, कृष्णा, (2013), *तर्कशास्त्र - एक रूपरेखा*, नई दिल्ली : डी. के. प्रिन्टवर्ल्ड।
6. ओलियरी, जि., (2020), *रिसर्च प्रोजेक्ट करने के लिए आवश्यक मार्गदर्शन*, नई दिल्ली : सेज प्रकाशन।
7. डेनिकोलो, पैम., & वेकर, सिंडा, (2020), *शोध प्रस्ताव कैसे करें तैयार*, नई दिल्ली : सेज प्रकाशन।

8. फ्रेडरिक, & कूलिज, (2020), *सांख्यिकी*, नई दिल्ली : सेज प्रकाशन।
9. मूर्ति, वासुदेव, (2020), *प्रभावी प्रस्ताव लेखन*, नई दिल्ली : सेज प्रकाशन।
10. Garett, H. E. (1982). *Statistics in Psychology and Education*. Bombay: Vakils, Fafer & Simons Pvt.
11. Kothari, C. R. (1985). *Research Methodology: Methods and Techniques*. New Delhi: Wiley Eastern Ltd.
12. Guilford, J. P., & Fruchter, B. (1987). *Fundamental Statistics in Psychology & Education*. New York: McGraw Hill.
13. Keeves, J. P. (1997). *Educational Research Methodology and Measurement: International Handbook*. Pergamon Press.
14. Best, J. W. (2000). *Research in Education*. New Delhi: Prentice Hall Inc.
15. Kerlinger, F. N. (2000). *Foundations of Behavioral Research*. New Delhi: Surjeet Publications.
16. Dawson, C. (2002). *Practical Research Methodology*. New Delhi: UBS Publication Distributors.
17. Kumar, R. (2005). *Research Methodology: A Step-by-Step Guide for Beginners*. Singapore: Pearson Education.
18. Pandey, K. P. (2005). *Fundamentals of Educational Research*. Varanasi: Vishwavidyalaya Prakashan.
19. Oliver, P. (2005). *Writing Your Thesis*. New Delhi: Vistaar Publications.
20. Sansanwal, D. N. (2020). *Research Methodology and Applied Statistics*. New Delhi: Shipra Publications.

# POOL OF MULTIDISPLINARY COURSES (General Disciplines)

**Credits - 4**
**Hours - 60**

## MD (G) 1: Financial Literacy

**Course Objectives:**

1. To develop familiarity with various aspects of financial literacy, including savings, investment, taxation and insurance.
2. To enhance understanding of the relevance and process of financial planning while promoting overall financial well-being.

**Learning Outcomes:**

After completion of the course, the students will:

1. Develop proficiency for personal and family financial planning.
2. Apply the concept of investment planning.
3. Able to analyze banking and insurance products.
4. Plan Personal tax planning.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 1 | Financial Literacy | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Financial Planning and Financial Products.**

- Introduction to Saving.
- Time value of money.
- Management of spending and financial discipline.

**Unit II Banking and Digital Payment.**

- Banking products and services; Digitization of financial transactions: Debit Cards (ATM Cards) and Credit Cards.
- Net banking and UPI, digital wallets; Security and precautions against Ponzi schemes and online frauds.

**Unit III Investment Planning and Management.**

- Investment opportunity and financial products.
- Insurance Planning: Life and non-life including medical insurance schemes.

**Unit IV Personal Tax.**

- Introduction to basic Tax Structure in India for personal taxation.
- Aspects of Personal tax planning.
- Exemptions and deductions for individuals.
- e-filing.

**Practical Exercises:**

1. Regular class activities to enhance students' understanding of topics and the application of concepts. The case study method may be followed as a teaching pedagogy.
2. Numerical questions pertaining to each unit wherever applicable should be practiced.
3. For the second unit, students may be assigned a project wherein they can log on to the website of various banks and conduct an in-depth analysis and comparison of various financial products offered.
4. For Until, a Project related to building a dummy portfolio of stocks and tracking their returns may be given.
5. An investment budget may be given to the students to select investment options that maximize the return and minimize the tax implications.
6. For the last unit, students may also file a dummy IT return to get hands-on experience with e-filing.
7. Students may conduct a financial literacy survey among at least 25 respondents to measure the level of financial literacy and share the findings in the awareness in the form of a report.
8. Any other Practical/Practice as decided from time to time.

**Essential/Recommended Readings/Texts:**

1. Bhasham, A. L., (1954), *Wonder that was India: A Survey of the Culture of the Indian Subcontinent Before the Coming of the Muslims*, London: Sidgwick and Jackson.
2. Indian Institute of Banking & Finance, (2017), *Introduction to Financial Planning* (4th ed.).
3. Sinha, M., (2017, July), *Financial Planning: A Ready Reckoner*, McGraw Hill.
4. Singh, A. K., *Financial Literacy*, Delhi: Taxmann.

**Credits - 4**

**Hours - 60**

## MD (G) 2: Fundamentals of Banking

**Course Objectives:**

1. To familiarize students with the structure and functioning of the Indian Banking System.
2. To explore the role of digitalization in transforming banking operations, enhancing customer experiences and improving financial inclusion.
3. To provide a comprehensive understanding of various banking functions, including deposit mobilization, credit creation and financial intermediation, while highlighting the role of banking in economic development.

**Learning Outcomes:**

After completion of the course, the students will:

1. Explain the origin, meaning and evolution of banking, including the Traditional Indian Banking System and assess the role of banks in economic development.
2. Analyze the types and structure of banks, their functions and integration of traditional and modern financial practices.
3. Demonstrate understanding of Negotiable Instruments, banking regulations, RBI functions, monetary policy, risk management strategies and the impact of technology and digital innovations in banking.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| **MD (G) 2** | **Fundamentals of Banking** | **04** | **0** | **0** | **04** |

**Details of Course:**

**Unit I Introduction.**

- Origin, Meaning and Definition of Bank.
- History of Banking System.
- Evolution of Banking System in India.
- Traditional Indian Banking System (Indigenous Banking, Hundis, Chit Funds).
- Structure of Indian Banking System.
- Role of Banks in Economic Development.

**Unit II Types and Functions of Banks.**

- Types of Banks:
  - Commercial Banks.
  - Regional Rural Banks.
  - Agricultural and Rural Development Banks.
  - Development Banks.

- Functions of Banks:
    - **Primary Functions**
      **A**. Accepting Deposits:
      1. Demand Deposits: Current and Saving; No Frills Account.
      2. Time Deposits: Recurring and Fixed Deposits, Flexi Deposits (Auto Sweep).

      **B**. Granting Loans and Advances:
      1. Term Loan, Short Term Credit.
      2. Overdraft, Cash Credit.
      3. Purchasing/Discounting of Bills.
    - **Secondary Functions**
      **A**. Agency Functions:
      1. Payment and Collection of Cheques, Bills and Promissory Notes.
      2. Execution of Standing Instructions.
      3. Acting as a Trustee, Executor.

      **B**. General Utility Functions:
      1. Safe Custody, Safe Deposit Vaults.
      2. Remittance of Funds, Pension Payments.
      3. Acting as a Dealer in Foreign Exchange.

**Unit III Negotiable Instrument.**
- Concept and Characteristics of Negotiable Instruments.
- Definition, Meaning and Characteristics of:
    - Promissory Note.
    - Bill of Exchange.
    - Cheque.
- Types of Cheques:
    - Bearers, Order and Crossed Cheques.
- Types of Crossing:
    - General and Special.

**Unit IV Banking Regulations and Monetary Policy.**
- Banking Regulation Act, 1949.
- Role and Functions of the Reserve Bank of India (RBI).
- Monetary Policy and Instruments: CRR, SLR, Repo, Reverse Repo.
- Basel Norms and Risk Management in Banking.
- Banking Ombudsman Scheme.

**Unit V Technology in Banking.**
- Need and Importance of Technology in Banking.
- Internet Banking, ATM.

- NEFT, RTGS, Mobile Banking.
- Credit Card, Debit Card.
- MICR, ECS (Electronic Clearing Services).
- SWIFT (Society for Worldwide Inter-Bank Financial Telecommunication).

**Essential/Recommended Readings/Texts:**

1. Basu, A.K. *Fundamentals of Banking*: Theory and Practice.
2. Bhattacharya, K.M., & Agarwal, O.P. (2014). *Basics of Banking and Finance*. Himalaya Publishing House.
3. Das, Biswajit (2023). *Basics of Banking*. Notion Press.

**Additional Readings:**

1. Shankar, Girija & Data, Vivek (2019). *Banking and Finance: Fundamentals of Banking*. Nirali Prakashan.
2. Jain, Sarita & Sharma, Nandini & Kumar, Bhupendra. *Fundamentals of Banking*. Thakur Publication Jaipur.
3. Relevant RBI Reports and official publications on Monetary Policy and Banking Reforms.

**Credits - 4**
**Hours - 60**

## MD (G) 3: ESG in the Bhartiya Context

**Course Objectives:**

1. To understand the concept of ESG (Environmental, Social and Governance) from both ancient Bhartiya and contemporary global perspectives.
2. To explore the contribution of Bhartiya thought and practices in shaping sustainable governance and responsible business models.
3. To analyze the ethical foundations of ESG through key Bhartiya philosophical concepts such as Dharma, Artha and Karma.
4. To examine the relevance of ancient Bhartiya environmental stewardship and social responsibility in addressing modern ESG challenges.
5. To foster critical thinking about integrating indigenous knowledge with contemporary ESG frameworks for global impact.

**Learning Outcomes:**

After completion of the course, the students will:

1. Explain the fundamental concepts of ESG and trace its evolution in India, integrating the values of *Artha* (Wealth) and *Dharma* (Ethics) from ancient Indian texts into modern financial ethics.
2. Analyze the Bhartiya Gurukul system as a sustainable education model and evaluate its contributions to ethical governance, environmental consciousness and social responsibility.
3. Examine the environmental consciousness embedded in Vedic traditions, including *Rta* (cosmic order), *Panch Mahabhutas* (Five Elements) and *Vasudhaiva Kutumbakam* (Universal Brotherhood) and apply these principles to modern corporate sustainability strategies.
4. Interpret the social aspect of ESG by exploring Bhartiya perspectives on corporate social responsibility, analyzing case studies on Indian corporate social practices and understanding the role of ethical business conduct in society.
5. Evaluate governance principles from ancient Bharat, including *Panchayati Raj* and *Janapadas* and assess their relevance to modern corporate governance while incorporating sustainability consciousness and technological advancements.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 3 | ESG in the Bhartiya Context | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction to ESG in the Bhartiya context.**

- Introduction to the concept of ESG (Environmental, Social and Governance)
- ESG Values as a core principle in Indian civilization.
- Responsible Investing: Ancient versus contemporary perspectives.
- Evolution of ESG laws and regulatory frameworks in India.

- ESG initiatives in Indian companies and institutions.
- The concept of “Artha” and “Dharma” in Financial Ethics – Insights from ancient Indian texts on responsible wealth generation.

**Unit II Bhartiya Gurukuls: Hubs of ESG.**

- Introduction to Bhartiya Gurukuls.
- Ideology and philosophical foundations of Bhartiya Gurukuls.
- ESG at the core of Bhartiya Gurukul education and practices.
- Sustainable development principles in ancient Bharat as reflected in Gurukul systems.
- Case study on ESG practices adopted by Bhartiya Gurukuls.

**Unit III ‘E’ in ESG: Environmental Consciousness in the Bhartiya Context.**

- Environmental consciousness: Roots in ancient Bhartiya scriptures.
- Environment as Gods in Hindu religious traditions.
- Environmental stewardship practices among ancient Bhartiya merchants.
- E for ‘Everybody’: Taking a holistic view of environment while framing corporate strategy.
- Vedic ecology and environmental protection concepts: Rta (cosmic order), Panch Mahabhutas (five elements) and Vasudhaiva Kutumbakam (universal brotherhood).

**Unit IV ‘S’ in ESG: The social perspective in the Bhartiya Context.**

- Describing the ‘Social’ aspect of ESG in the contemporary context.
- Demystifying the ‘S’ in ESG from a Bhartiya perspective.
- Social concerns and priorities in CSR activities of Indian corporates.
- Case studies on social practices adopted by corporates across India.

**Unit V ‘G’ in ESG: Governance perspective as a core of Bharat.**

- Decoding the ‘G’ in ESG: Understanding governance in a contemporary context.
- Lessons on governance from ancient Bharat.
- Governance and ethics: A hand-in-hand approach for sustainable systems.
- Panchayati Raj and Janapadas as early models of democratic governance in ancient Bharat.
- Impact of technology and sustainability consciousness on modern governance frameworks.

**Practical Exercises:**

1. Conduct a comparative analysis of ESG laws by selecting two companies—one Indian and one global—and researching their ESG policies, reports and sustainability practices.
2. Analyze ESG principles in Bhartiya Gurukuls by researching sustainability practices followed in ancient Gurukul education, such as self-sufficiency and environmental conservation.
3. Explore scriptural insights on environmental conservation by identifying references to environmental consciousness in Bhartiya scriptures such as the Vedas, Upanishads and Arthashastra.
4. Conduct a CSR impact study by selecting an Indian corporate entity and analyzing its corporate social responsibility (CSR) initiatives. They will engage with stakeholders such

as employees and community members through interviews or surveys to assess the impact of these initiatives.

5. Examine governance models from ancient and modern India by studying an ancient Bhartiya governance framework, such as the Mauryan administration or Arthashastra principles and comparing it with governance practices in a present-day Indian corporate or government institution.

**Essential/Recommended Readings/Texts:**


1. Kindle Securities and Exchange Board of India, (2021, May).
2. Jain, C., (2022). *Integrating corporate sustainability: Handbook for understanding and implementing sustainability in any business*.
3. Pagitsas, C., (2022). *Chief sustainability officers at work: How CSOs build successful sustainability and ESG strategies*.
4. Dadhich, G., & Atrey, R. R., (2024). *Demystifying ESG – Combining a theoretical understanding with practical applications to address each aspect of ESG essential for the Indian business landscape*. Taxman.
5. SEBI issues circular on business responsibility and sustainability reporting by listed entities. [Press Release].
6. Retrieved from - https://www.sebi.gov.in/media/press-releases/may-2021/sebi-issuescircular-on-business-responsibility-and-sustainability-reporting-by-listedentities-_50097.html

**Credits - 4**

**Hours - 60**

## MD (G) 4: Indian (Bhartiya) Management Principles and Practices

**Course Objectives:**

1. To introduce students to the foundational management principles of ancient Bharat and their historical evolution.
2. To explore the contributions of Bhartiya thought in shaping contemporary management concepts and practices.
3. To connect students with the philosophical, ethical and practical roots of Indian management principles.
4. To develop an appreciation for the indigenous knowledge systems that contributed to the global discourse on management.
5. To enable students to critically compare ancient Bhartiya management concepts with modern frameworks for holistic learning.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Analyze the foundational concepts of Bhartiya (Indian) Management Principles and Practices, tracing their historical evolution and relevance in modern contexts.
2. Evaluate the contributions of Bhartiya (Indian) scriptures to the evolution of management thought and their practical applications in contemporary leadership and business.
3. Assess the impact of Bhartiya (Indian) Management Principles on contemporary management, exploring their influence on leadership, business strategy and ethical decision-making.
4. Conduct case studies on Bhartiya (Indian) Management Principles, drawing insights from ancient texts and indigenous business practices.
5. Undertake project work to research and document the application of Bhartiya (Indian) management principles in real-world business environments.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 4 | Indian (Bhartiya) Management Principles and Practices | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Indian (Bhartiya) Management Principles and Practices: A brief history.**

- Meaning and concept of Indian (Bhartiya) management.
- History of Indian management thought.
- IKS (Indigenous Knowledge Systems) as the soul of Indian management.
- Indian management as a source of solutions for the future.
- Ethics and values for managers: Lessons from Bharat.

**Unit II Indian (Bhartiya) Scriptures and Management.**

- Management insights from the Bhagavad Gita.
- Lessons on management from the Ramayana.
- Vedantic and modern perspectives on management.
- Contributions of Bhartiya scriptures (Guru Granth Sahib ji, Agam Sutras: teachings of Lord Mahavira, Tripitaka) to the evolution of management concepts.

**Unit III Impact of Indian (Bhartiya) Management Principles and Practice on Contemporary Management.**

- Integrating values into present-day leadership practices.
- Building business supremacy through Vedic philosophy.
- Indigenous management research and its significance.
- Spirituality and management growth: An Indic perspective.

**Unit IV Case Studies on Indian (Bhartiya) Management Principles and Practices.**

- Effective leadership: Lessons from ancient Bharat.
- Integration of IKS in commerce and business management practices.
- Bhartiya approach to research and pedagogy in management.
- Community-based business management models.

**Unit V Project Work.**

- Students will undertake a project highlighting **10 management principles**, tracing their origins in Bhartiya scriptures, examining their relevance to contemporary contexts and reflecting on the lessons learned.

**Practical Exercises:**

1. Draw a timeline depicting the evolution of Indian (Bhartiya) Management Principles and Practices.
2. List out the scriptures they follow and Indian (Bhartiya) Management Principles and Practices they have adopted from them.
3. Conduct a comparative analysis of contemporary and ancient Indian (Bhartiya) Management Principles and Practices.
4. Analyze the contribution of Spirituality in evolution of Indian (Bhartiya) Management Principles and Practices.
5. Study the contribution of Indian (Bhartiya) Management Principles and Practices towards community building.

**Essential/Recommended Readings/Texts:**

1. Chatterjee, D., (2012). *Timeless leadership: 18 leadership sutras from the Bhagavad Gita*. John Wiley & Sons.
2. Singh, P. K., (2020). *Management Sutras from Sanskrit Scriptures*. Writers Choice.
3. Kaul, A., & Gupta, V., (2021). *Demystifying Leadership: Unveiling the Mahabharata Code*. Bloomsbury Publishing.

4. Choudhary, D., (2022). *BE THE LEADER, NOT A BOSS! 25 Secrets to be Entrepreneurial Leader: 5000 Years old Secrets from Indian Mythology*. Management Education.

**Additional Readings:**

1. Rai, H., (2005). *The role of Hinduism in global India and her business ethics*. *Business and religion: A clash of civilizations*, 379–389.
2. Sudhakar, G. P., (2021). *Bhartiya management: the new paradigm for Indian managers*. *International Journal of Indian Culture and Business Management*, 23(3), 324–342.
3. Sudhakar, G. P., (2021). *A case for Indian Content in Management Education*. *University News-A weekly Journal of Higher Education*, Associate Javascript.
4. Singh, P. K., (2021). *Eternal Wisdom for Managing Health and Well-being in Modern Age: Insights from Scriptures*. *International Journal on Vedic Foundations of Management*.

Credits - 4

Hours - 60

## MD (G) 5: Creativity and Innovation

**Course Objectives:**

1. To enable learners to understand various approaches used by managers and organizations to foster innovation.
2. To explore strategies for creating and sustaining high levels of innovation within organizations.
3. To analyze the role of leadership and organizational culture in driving innovation.
4. To examine tools and techniques that support innovation management and implementation.
5. To develop skills for applying innovative thinking to solve real-world business challenges.

**Learning Outcomes:**

After completion of the course, the students will:

1. Analyze the creative thoughts of renowned personalities in the past and its contribution towards the success and shortcomings of business model, considering the role of creativity and innovation.
2. Generate innovative ideas for business, justify these ideas using ethical values and principles from Indian thought traditions, fostering sustainable and responsible innovation practices for the future.
3. Interpret the Business Competence achieved by various organisations by using the Innovative Business Model.
4. Describe the significance of innovative leadership drawn from Indian leadership philosophies and lead with a futuristic mindset that fosters innovation, ethical practices and social responsibility.
5. Analyze patents already granted in their field of interest and make a case with innovative idea for filing a new patent.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (G) 5 | Creativity and Innovation | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Creativity and Its Concepts.**

- Meaning and concept of creativity.
- Creativity process.
- Nature and characteristics of creativity and creative persons.
- Factors affecting creativity.
- Recognizing and avoiding mental blocks.
- Thinking preferences and risk-taking.
- Creativity styles.
- Creative thinking tools.

- Innovation vs. creativity.
- Types of innovations: Incremental and radical.

**Unit II Idea Generation and Creativity in Problem Solving.**

- Ideation and pattern breaking strategies.
- Mind stimulation techniques: games, brain-twisters and puzzles.
- Idea-collection processes: brainstorming, brain-writing, SCAMPER method, metaphoric thinking, outrageous thinking, mapping thoughts.
- Eight-Dimensional (8D) approach to ideation.
- Systematic inventive thinking: TRIZ methodology.
- Lessons on inculcating idea generation and creativity from Bhartiya Gurukul system.

**Unit III Innovation Management.**

- Invention and discovery: process and typology.
- Methods and techniques of innovation.
- Arenas of innovative competence.
- Categories of innovation: product, process and service.
- Innovation finance: venture capital, angel investors.
- Evaluation of effectiveness of innovation.
- Innovations from Bharat.

**Unit IV Setting the Right Ecosystem for Innovation.**

- Essence and dimensions of the ecosystem for innovation.
- Intrinsic and extrinsic motivation.
- Leadership styles fostering innovation.
- Organizational alignment for innovation.
- Creating a self-sustaining culture of innovation.
- Organizational enrichment.
- Bhartiya brands on the global map as a product of the right ecosystem for innovation.

**Unit V Intellectual Property.**

- Introduction to intellectual property: patents, copyrights, trademarks.
- Transforming innovations into proprietary assets: significance and steps.
- Strategizing intellectual property management.
- Issues in IP enforcement: piracy, counterfeiting, copyright violation.
- IPR and new product development.
- Government policies and issues on national and international IP legislations and treaties.

**Practical Exercises:**

1. Identify a creative person to comprehend, study, analyze and present a report highlighting the contribution of his/her creative work.
2. Generate a creative idea for business and present the same in the class for critical evaluation by other learners regarding its uniqueness and feasibility.

3. Identify an Innovative Business Model (like Amazon, Redubs, Flipkart, Ola, Uber, Big Basket, Zomato, Swingy, etc.) used by an organization recently and present a report on Business Competence achieved by it.
4. Analyze the case study on Innovative Leader like Steve Jobs who launched Apple 's iPod & iPhone or any other case study on innovation and present a report on the key learnings.
5. Select an aspect (in the field of their interest) on which patent has been granted already and think of an innovative idea so that it makes a case for filing a new patent application.

**Essential/Recommended Readings/Texts:**

1. Harvard Business Essentials. (2003). *Managing Creativity and Innovation*. Boston: Harvard Business School Publishing.
2. Prather, C. (2010). *The Manager's Guide to Fostering Innovation and Creativity in Teams*. New York: McGraw-Hill Education.

**Credits - 4**
**Hours - 60**

## MD (G) 6: Leadership Development

**Course Objectives:**

1. To introduce the fundamental concepts of leadership and its significance in various contexts (professional and personal).
2. To explore multiple leadership theories and their historical evolution and application.
3. To enable learners to critically analyze and compare different leadership styles.
4. To equip learners with the skills to evaluate real-life scenarios and determine the most effective leadership approach.
5. To develop decision-making abilities for choosing appropriate leadership styles in diverse situations.
6. To foster self-awareness and reflection on personal leadership preferences and values.
7. To enhance practical skills in adaptive leadership for handling dynamic career and life challenges.

**Learning Outcomes:**

After completion of the course, the students will:

1. Describe the concept of leadership and analyze various leadership theories from both western and Bhartiya perspectives.
2. Evaluate different leadership theories and their application in appropriate situations.
3. Demonstrate the role of culture and leadership essential for effective decision-making and team management.
4. Analyze the emergence of E-leadership, its significance and use of appropriate technology for accomplishment of objectives.
5. Conduct case studies on contemporary leaders to take lessons on their vision, leadership styles and ways to manage their people effectively.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (G) 6 | Leadership Development | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction to Leadership.**

- Meaning and definitions of leadership.
- Significance of leadership in organizations and society.
- Qualities of a good leader (key traits and attributes).
- Difference between leadership and management (comparative analysis).
- Basic styles of leadership:
    - **Autocratic**: meaning, features, advantages, disadvantages, suitability.
    - **Democratic**: meaning, features, advantages, disadvantages, suitability.

  - Laissez-faire: meaning, features, advantages, disadvantages, suitability.
- Rensis Likert's styles of management (exploration of the four systems).
- Tannenbaum and Schmidt Model (leadership continuum).
- Bhartiya Leaders and their leadership styles (examples and case discussions).

**Unit II Theories of Leadership**

- Traditional Theories:
  - Great Man Theory.
  - Trait Theory.
- Behavioral Theories:
  - Ohio State Studies.
  - Michigan Studies.
  - Managerial Grid (Blake and Mouton).
- Contingency Theories:
  - Fiedler's Contingency Model.
  - Hersey and Blanchard's Situational Model.
  - Path-Goal Theory.
- Modern Leadership Approaches:
  - Transformational Leadership.
  - Transactional Leadership.
  - Charismatic Leadership.
  - Servant Leadership.
  - Ethical Leadership.

**Unit III Culture and Leadership.**

- Trompenaars Cultural Dimensions (cross-cultural differences).
- Hofstede's Cultural Study (dimensions of national cultures).
- Edward Hall's Cultural Theory (high-context and low-context cultures).
- GLOBE Model: Global Leadership and Organizational Behaviour Effectiveness.
- Organizational Culture and Leadership (influence of culture on leadership effectiveness).
- OCTAPACE profile by Uday Parekh:
  - Openness, Collaboration, Trust, Autonomy, Proactivity, Authenticity, Confrontation, Experimentation.

**Unit IV E-Leadership.**

- Meaning and definition of e-leadership.
- Need and significance of e-leadership, especially:
  - Pre-COVID era.
  - During COVID pandemic.
  - Post-COVID context.
- Social media and leadership (impact and utilization).

- Digital communication tools for leadership:
  - WhatsApp, emails, Facebook, LinkedIn, Twitter, Instagram.
  - Google Meet, MS Teams, Zoom.
- Collaborative online tools:
  - Google Drive (Docs, Forms, Sheets), other cloud platforms.

**Unit V Contemporary Leaders.**

- Case studies and discussions on the leadership styles and practices of:
  - Narendra Modi.
  - Indra Nooyi.
  - Ratan Tata.
  - Narayan Murthy.

**Practical Exercises:**

1. Identify a Leader of your choice, prepare and present a report highlighting the important traits that have contributed to the effectiveness of that Leader. (Should be done in a team)
2. Movie screening of movies like Mission Mangal, Lagaan, Chak De, Rock On, Lakshya, Super 30 etc., open house for discussing the movie and a report/ presentation on lessons learnt from the movie.
3. Administering Fidler 's Least Preferred Coworker scale in the class on all the students to make sure that they understand the theory well.
4. Administering Managerial Grid questionnaire in order to help students assess their style of leadership.
5. Present how E leadership has changed from pre corona period to during corona period to post corona period.
6. Practice using collaborative tools online like google docs, mindmeister etc.

**Essential/Recommended Readings/Texts:**

1. Day, D. V., (2014). *The Oxford Handbook of Leadership and Organisations*. Oxford, New York: Oxford University Press.
2. Mittal, R., (2015). *Leadership: Personal Effectiveness and Team Building*. Uttar Pradesh: Vikas Publishing House Pvt. Ltd.
3. Northouse, P., (2018). *Leadership: theory and practice*. California: SAGE Publications Inc.
4. Robbins, S. P., Judge, T. A., & Vohra, N., (2018). *Organisational Behaviour* (18th ed.). Pearson.
5. Hughes, R. L., Ginnett, R., & Gordon, C., (2019). *Leadership: Enhancing the lessons of experience* (9th ed.). McGraw Hill Education.
6. Willink, J., (2020). *Leadership Strategy and Tactics: Field Manual*. New York: Macmillan Publishers.
7. Nooyi, I. K., (2021). *My Life in Full: Work, Family and Our Future*. Penguin.
8. Chhabra, T. N., *Business organisation and Management*. Sun India Publications.

9. Gupta, C. B., *Business organisation & management*. Sun India Publication, New Delhi.
10. Koontz, H., & Weihrich, H., *Essentials of management: An international and leadership perspective*. Paperback.

**Additional Readings:**

1. https://repository.iimb.ac.in/bitstream/2074/11692/1/Reddy_VKPA_2011_Vol.36_Iss.3.pdf
2. https://www.google.com/search?q=2.https%2F%2Ficmrindia.org%2Fcasestudies%2FCase_Studies&oq=2.https%2F%2Ficmrindia.org%2Fcasestudies%2FCase_Studies&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIGCAEQRRg60gEIMzUyNmowajSoAgCwAgE&sourceid=chrome&ie=UTF-8
3. https://hbr.org/2010/03/leadership-lessons-from-india

**Credits - 4**

**Hours - 60**

## MD (G) 7: Personal Financial Planning

**Course Objectives:**

1. To familiarize learners with the fundamental concepts of personal financial planning.
2. To develop an understanding of savings, investment options and financial instruments.
3. To introduce the principles of taxation and its impact on personal financial planning.
4. To explore the importance and types of insurance as a risk management tool.
5. To equip learners with strategies for retirement planning, ensuring financial security in later years.
6. To enhance decision-making skills for selecting appropriate financial products and services.
7. To promote financial literacy and responsibility, enabling informed financial decisions in both personal and professional life.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand financial goals, budgeting and the time value of money while developing disciplined financial habits. Apply financial prudence inspired by traditional Indian wealth management practices to ensure long-term financial security.
2. Evaluate various investment avenues, including mutual funds, real estate, government bonds and digital currency, by analyzing risk-return dynamics. Apply portfolio diversification strategies rooted in both modern finance and ancient Indian economic insights.
3. Assess tax planning strategies for individuals, compare tax structures and understand legal provisions for exemptions and deductions. Examine taxation principles from *Arthashastra* to differentiate between tax avoidance and tax evasion while promoting ethical tax practices.
4. Develop an understanding of risk management through insurance planning, including life, health, property and professional liability insurance, ensuring financial security across various life stages.
5. Design effective retirement plans by exploring pension schemes, reverse mortgage options and estate planning while integrating sustainability and ethical wealth management inspired by traditional Indian financial wisdom.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (G) 7 | Personal Financial Planning | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction to Financial Planning.**

- Understanding financial goals and their importance.
- Steps in financial planning (from goal-setting to implementation and monitoring).
- Budgeting: tracking incomes and payments effectively.
- Time value of money: concepts of present value, future value and discounting.
- Introduction to savings: significance and benefits.
- Managing spending and cultivating financial discipline.
- Setting alerts and maintaining sufficient funds for fixed commitments.

**Unit II Investment Planning.**

- Process and objectives of investment: building wealth and risk management.
- Concepts and measurement of return and risk for various asset classes.
- Measurement of portfolio risk and return (including systematic and unsystematic risks).
- Diversification and portfolio formation: reducing risk through asset allocation.
- Types of investments:
    - Gold bonds.
    - Real estate.
    - Greenfield and brownfield projects.
    - Fixed income instruments (e.g., bonds, debentures).
    - Financial derivatives and commodity markets in India.
    - Mutual fund schemes (types and benefits).
    - International investment avenues (foreign equities, ETFs).
    - Currency derivatives and digital currency (e.g., cryptocurrencies, CBDCs).

**Unit III Personal Tax Planning.**

- Tax structure in India for personal taxation (including slabs and rates).
- Scope of personal tax planning: reducing tax liability through lawful means.
- Exemptions and deductions available under different heads of income and gross total income.
- Comparison of tax regimes: Special provision u/s 115BAC vs. General provisions of the Income Tax Act, 1961.
- Tax avoidance vs. tax evasion: legal and ethical considerations.
- Taxation principles in Arthashastra: Kautilya’s insights on duties and responsibilities in taxation.

**Unit IV Insurance Planning.**

- Need and significance of insurance as a risk mitigation tool.
- Types of insurance:
    - Life insurance.
    - Health insurance.
    - Property insurance.
    - Credit life insurance.

- Professional liability insurance.

**Unit V Retirement Benefits Planning.**

- Retirement planning goals: ensuring post-retirement financial stability.
- Process of retirement planning: setting goals, estimating expenses, creating a savings plan.
- Pension plans available in India: NPS, EPF, PPF, annuities, etc.
- Reverse mortgage: leveraging property assets for income in retirement.
- Estate planning: succession planning, wills and distribution of assets.

**Practical Exercises:**

1. Perform electronic fund transfers through net banking and UPI.
2. Identify certain recent Ponzi schemes in the market.
3. Prepare tax planning for a hypothetical individual.

**Essential/Recommended Readings/Texts:**


1. Madura, J. - *Personal Finance‖*, Pearson.
2. Indian Institute of Banking & Finance. *Introduction to Financial Planning*. Taxmann Publication, New Delhi.
3. Keown A.J. *Personal Finance*. Pearson, New York.
4. Pandit, A. *The Only Financial Planning Book that You Will Ever Need*. Network 18 Publications Ltd., Mumbai.
5. Sinha, M. *Financial Planning: A Ready Reckoner‖* McGraw Hill Education, New York.
6. Tripathi, V. *Fundamentals of Investment*. Taxmann Publication, New Delhi.

**Credits - 4**

**Hours - 60**

## MD (G) 8: Finance for Everyone

**Course Objectives:**

1. To provide an integrated understanding of financial planning concepts and practices.
2. To familiarize learners with key financial planning components: savings, investments, taxation, insurance and retirement.
3. To develop skills for evaluating and applying financial planning tools and techniques.
4. To enhance the ability to make informed and effective financial decisions.
5. To equip learners to integrate financial planning strategies across different financial domains.
6. To promote a holistic view of financial well-being and long-term financial stability.

**Learning Outcomes:**

After completion of the course, the students will:

1. Develop a strong foundation in financial literacy, financial planning and budgeting by understanding economic wants, resource management and avenues for savings and investments. Apply insights from *Kautilya's Arthashastra* on wealth management and taxation for sustainable financial decision-making.
2. Analyze the functioning of different banking institutions, services and digital banking innovations, along with an understanding of financial security measures. Evaluate lessons from India's ancient temple economies for ethical and sustainable financial practices.
3. Understand and utilize various post office savings schemes, payment systems and international money transfer services, fostering financial inclusion and literacy at the grassroots level. Examine the role of India Post in financial accessibility and historical context in wealth preservation.
4. Assess the importance of life, health and property insurance policies for financial security and risk mitigation, comparing different insurance schemes from private and public institutions, including India Post. Understand the relevance of social security principles from traditional Indian economic thought.
5. Comprehend stock market operations, investment instruments and risk management strategies while applying wealth creation principles from *Arthashastra*. Develop financial acumen by analyzing market trends, taxation policies and the role of mutual funds in portfolio diversification.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (G) 8 | Finance for Everyone | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction, Financial Planning and Budgeting.**

- Meaning, importance and scope of financial literacy.
- Prerequisites for financial literacy:
    - Level of education.
    - Numerical and communication ability.
- Financial institutions:
    - Banks.
    - Insurance companies.
    - Post offices.
    - Mobile app-based services.
- Need to avail financial services from banks, insurance companies and postal services.
- Concept of economic wants and methods for satisfying these needs.
- Balancing between economic wants and resources.
- Meaning, importance and need for financial planning.
- Types of budgets:
    - Personal budget.
    - Family budget.
    - Business budget.
    - National budget.
- Procedure for financial planning and preparing budgets.
- Budget surplus and budget deficit:
    - Avenues for savings from surplus.
    - Sources for meeting deficits.
- Insights from Kautilya's Arthashastra: wealth management and taxation.

**Unit II Banking Services.**

- Types of banks.
- Banking products and services.
- Types of deposit accounts:
    - Savings bank account.
    - Term deposit.
    - Current account.
    - Recurring deposit.
- Banking documentation: PAN card, address proof, KYC norms.
- Types of loans:
    - Education, consumer durable, vehicle, housing loans.
    - Short-term, medium-term, long-term loans.
    - Microfinance, bank overdraft, cash credit.
    - Mortgage, reverse mortgage, hypothecation, pledge.

- Agricultural and related interest rates offered by nationalized banks.
- Cashless banking and e-banking: CIBIL, ATM, net banking, RTGS, NEFT, IMPS, ECS, debit/credit card, app-based payments, bank drafts, pay orders.
- Banking complaints and ombudsman.
- Ancient Indian banking systems: temple economies (e.g., Tirupati, Padmanabhaswamy) and lessons learnt.

**Unit III Financial Services from India Post Office.**

- Post office savings schemes:
  - Savings bank, recurring deposit, term deposit, monthly income scheme.
  - Kisan Vikas Patra, NSC, PPF, senior citizen savings scheme, Sukanya Samriddhi Yojana.
- India Post Payments Bank.
- Money transfer services:
  - Money order, e-money order, instant money order.
  - Collaboration with Western Union, Mo Videsh.
  - International money transfer services (Money Gram, Indian postal order).

**Unit IV Insurance Services.**

- Life insurance policies:
  - Term life, endowment, pension, ULIP.
- Health insurance plans:
  - Comparison across various providers.
- Property insurance policies.
- Post office life insurance schemes:
  - Postal Life Insurance (PLI).
  - Rural Postal Life Insurance (RPLI).

**Unit V Stock Markets – Some Basic Concepts.**

- Key stock market terms: SENSEX, NIFTY, primary/secondary markets, IPO, FPO, OFS, block deals.
- Instruments: equity shares, preference shares, debentures, bonus shares, stock splits.
- Corporate actions: dividend, buyback.
- Accounts and documentation: DEMAT, trading account, delivery instruction slips (DI Slips).
- Stock classifications: blue chips, defensive stocks.
- Valuation concepts: face value, market value, market capitalisation.
- Trading dynamics: pre-opening session, trading session, opening/closing price, business days.
- Market trends: bull, bear, bull market, bear market.

- Risk management tools: stop loss, derivatives (call option, put option), hedging, holding period.
- Tax on capital gains: short-term and long-term capital gains.
- Mutual funds and their schemes.
- Wealth creation and sustenance principles from Arthashastra.

**Practical Exercises:**

1. Visit banks, post offices and insurance companies to collect information and required documents related to the services offered by these institutions and to know the procedure for availing of these services.
2. Carry out the comparative analysis of different types of life insurance policies.
3. Carry out the comparative analysis of different types of health insurance policies.
4. Prepare a personal and family budget for one/six/ twelve months on imaginary figures.

**Essential/Recommended Readings/Texts:**


1. Bhattacharya, (2018). *Indian Financial System*. Oxford: Oxford University Press.
2. Avadhani, V. A. *Investment Management*. Mumbai: Himalaya Publishing House Pvt. Ltd.
3. Chandra, P. *Investment Game: How to Win*. New Delhi: Tata McGraw Hill Education.
4. Kothari, R. *Financial Services in India-Concept and Application*. New Delhi: Sage Publications India Pvt. Ltd.
5. Milling, B. E. *The Basics of Finance: Financial Tools for Non-Financial Managers*. Indiana: Universe Company.
6. Mittra, S., Rai, S. K., Sahu, A. P., & Starn, H. J. *Financial Planning*. New Delhi: Sage Publications India Pvt. Ltd.
7. Batra, J. K. *Accounting and Finance for Non-finance Managers*. Sage Textbook.
8. Sofat, R., & Hiro, P. *Basic Accounting* (3rd ed.). PHI Learning.
9. Zokaityte, A. *Financial Literacy Education*. London: Palgrave Macmillan.

**Credits - 4**

**Hours - 60**

## MD (G) 9: Project Management

**Course Objectives:**

1. To develop a comprehensive understanding of project preparation frameworks for organizational projects.
2. To equip learners with the skills to appraise projects effectively based on key performance criteria.
3. To enable learners to design and implement monitoring systems for projects in various organizational contexts.
4. To familiarize learners with control mechanisms for ensuring project success and timely completion.
5. To integrate theoretical knowledge and practical approaches for managing the lifecycle of a project efficiently.
6. To enhance decision-making skills related to project planning, appraisal and execution.

**Learning Outcomes:**

After completion of the course, the students will:

1. Explain the concept, attributes and lifecycle of a project, integrating traditional Bhartiya principles of management (*Arthashastra*, *Vastu Shastra* insights on planning and indigenous cooperative models) with modern project management frameworks.
2. Analyze project feasibility in technical, marketing and financial dimensions while incorporating sustainable and ethical financing practices derived from Bhartiya traditions, tax considerations and contemporary legal aspects.
3. Apply project scheduling and appraisal techniques, including Social Cost-Benefit Analysis (SCBA) and investment criterion models, integrating ancient Bhartiya decision-making principles on resource optimization and public welfare.
4. Utilize PERT and CPM for critical path analysis, resource allocation and time-cost trade-offs, drawing on traditional Indian planning models in irrigation, temple architecture and town planning for efficient execution.
5. Evaluate project risk, quality and performance using structured methodologies, integrating ancient risk mitigation strategies (*Chanakya's risk foresight*) with contemporary project audit and closure frameworks.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (G) 9 | Project Management | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction.**

- Concept and attributes of a project.

- Project Management Information System (PMIS).
- Project management process and principles.
- Role of a project manager.
- Relationship between project manager and line manager.
- Project stakeholder analysis.
- Identification of investment opportunities.
- Project life cycle.
- Project planning, monitoring and control of investment projects.
- Pre-feasibility study.
- Common sources of conflict within a project environment.

**Unit II Project Preparation and Budgeting.**

- Technical feasibility.
- Marketing feasibility.
- Financial planning:
    - Estimation of costs and funds (including sources of funds).
    - Loan syndication for projects.
- Demand analysis and commercial viability (brief introduction to NPV).
- Project budget preparation.
- Collaboration arrangements.
- Tax considerations and legal aspects.

**Unit III Project Scheduling and Appraisal.**

- Decomposition of work into activities.
- Determining activity-time duration.
- Business criteria:
    - Growth.
    - Liquidity.
    - Profitability.
- Social cost-benefit analysis for public and private sector projects.
- Investment criteria and choice of techniques.
- Estimation of shadow prices and social discount rate.

**Unit IV Project Planning Techniques.**

- Determining project duration using PERT and CPM techniques.
- Resource allocation to activities.
- Cost and time management issues in project planning and management.

**Unit V Project Risk and Performance Assessment.**

- Project risk management: identification, analysis and reduction.

- Project quality management.
- Project performance measurement and evaluation.
- Preparation of project report.
- Project closure and audit.

**Practical Exercises:**

1. Examine the project running in the local area and list the activities required for project completion.
2. Develop time estimates for various activities.
3. Evaluate the critical activities of the project using CPM technique.
4. Find out the delays in the activities, if any and their impact on cost and project completion.

**Essential/Recommended Readings/Texts:**


1. Khatua, S. (2011). *Project Management and Appraisal*. Oxford: Oxford Press University.
2. Gray, C. F., Larson, E. W., & Desai, G. V. (2014). *Project Management: The Managerial Process*. New Delhi: Tata McGraw Hill.
3. Gido, J., & Clements, J. P. (2015). *Project Management*. New Delhi: Cengage Learning Pvt. Ltd.
4. Chandra, P. (2019). *Projects: Planning, Analysis, Selection, Financing, Implementation and Review*. New Delhi: Tata McGraw Hill.
5. Kanda, A. *Project Management: A Life Cycle Approach*. PHI Learning.

Credits - 4

Hours - 60

## MD (G) 10: Bharatiya Social Institutions and Polity

**Course objectives:**

1. To generate interest in Ancient Sociological and Political Structure of the Society. students.
2. To impart knowledge of the ancient Political Thinkers.
3. To impart general skills to argue on the related topics.
4. To establish the relevance of Ancient Bharatiya Social and Political Institutions.

**Learning outcomes:**

After the completion of the course, the students will:

1. Aware about Social institutions and Bharatiya Polity have been highlighted in *Dharma and Artha śāstra* literature.
2. Be acquainted with various aspects of social institutions and Bharatiya polity as propounded in the ancient Sanskrit texts such as *Mahābhārata*, Kauṭilya's *Arthaśāstra* and other works known as *Nītiśāstra.*

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical / Practice | |
| MD (G) 10 | Bharatiya Social Institutions and Polity | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit 1 Foundations of Bharatiya Society.**

- Dharma-
  - Sources of Dharma (*Manusmṛti,* 2,12; *Yājñavalkyasmṛti*,1.7)
  - Fourteen-*Dharmasthānas* (*Yājñavalkyasmṛti*,1.3)
  - *Dharma* as Social and Moral Duty (*Mitākṣarāṭīkā* on *Yājñavalkyasmṛti*,1.1).
  - (*Manusmṛti*,6.92);
- Dharma as an evolving institution – Directions of and reasons for changes in DharmaŚāstra.
- Four aims of life *'Puruṣārtha Catuṣṭaya'- 1. Dharma,* 2. *Artha*, 3. *Kāma*, 4. *Mokṣa.*

**Unit II Structure of Society.**

- Varṇa-System and Caste System-
  - Four-fold division of *Varṇa* System, (*Ṛgveda*, 10.90.12), *Mahābhārata, Śāntiparva*,72.3.8
  - Division of *Varṇa* according to *Guṇa* and *Karma* (*Bhagvadgīta*, 4.13, 18.41-44).

  - Assimilation of foreign tribes in Varṇa-System (*Mahābhārata, Śāntiparva*, 65.13-22).
- **Position of Women in the Society.**
  - Brief survey of position of women in different stages of Bharatiya Society.
  - Position of women in *Mahābhārata* (*Anuśāsanaparva* 46.5-11, *Sabhāparva*, 69.4-13.
  - Praise of women in The *Bṛhatsaṁhitā* of Varāhamihira (*Strīprasaṁsā,* chapter-74.1-10)

**Unit III State and Kingship.**

- Concept of Welfare State in *Arthaśāstra* of Kauṭilya (*Arthaśāstra*, 1.13: '*matsyanyāyābhibhutah*' to '*yo' asmāngopāyatīt*i')
- Essential Qualities of King (*Arthaśāstra*,6.1.16-18: '*sampādayatyasampannaḥ*' to '*jayatyeva na hīyate*')
- Conduct of the state (Manu Smriti 7 Verses 1 to 15)

**Unit IV State and International Relations.**

- 'Saptāṅga' Theory of State: 1. Svāmi, 2. Amātya, 3. Janapada 4. Pura, 5. Kośa, 6. Daṇḍa and 7. Mitra (Arthaśāstra, 6.1. Mahābhārata, Śāntiparva**,** 56.5, Śukranīti, 1.61-62**)**.
- 'Maṇḍala' Theory of Inter-State Relations: 1. *Ari*, 2. *Mitra*, 3. *Ari-mitra*, 4. *Mitra- mitra*, 5. Ari-mitramitra;
- *Śāḍgunya'*Policy of War and Peace:
  1. *Sandhi*, 2. *Vigraha*, 3. *Yāna*, 4. *Āsana*, 5. *Saṁśraya* 6. *Dvaidhibhāva*.

**Essential/Recommended Readings/Texts:**

1. Vyāsa. (1952–1959). *Mahābhārata* (7 Vols) (Trans. H. P. Shastri). London: Royal Asiatic Society.
2. Kautilya. (1965). *Arthaśāstra* (Ed. R. P. Kangale). Delhi: Motilal Banarsidass.
3. Yājñavalkya. (1967). *Yājñavalkyasmṛti with Mitākṣarā commentary*. Varanasi: Chowkhamba Sanskrit Series Office.
4. Manu. (2006). *Manu's Code of Law: A Critical Edition and Translation of the Mānava-Dharmaśāstra* (Ed. & Trans. P. Olivelle). New Delhi: Oxford University Press.
5. उदयवीर शास्त्री (सम्पा.), *कौटिलीय अर्थशास्त्र*, दिल्ली : मेहर चन्द लछमन दास।
6. वराहमिहिर, *बृहत्संहिता* (हिन्दी अनुवाद: बलदेव प्रसाद मिश्र), मुंबई : खेमराज श्रीकृष्णदास प्रकाशन।
7. व्यास, *महाभारत* (भाग १–६) (हिन्दी अनुवाद सहित), गोरखपुर : गीता प्रेस।
8. मनु, *मनुस्मृति*, दिल्ली : चौखम्बा प्रकाशन।

**Additional Readings:**

1. Ghosal, U. N. (1959). *A History of Bharatiya Political Ideas*. Bombay: Oxford University Press.
2. Law, N. S. (1960). *Aspect of Ancient Bharatiya Polity*. Calcutta: University of Calcutta.

3. Altekar, A. S. (1965). *The Position of Women in Hindu Civilization*. Delhi: Motilal Banarsidass.
4. Saletore, B. A. (1963). *Ancient Bharatiya Political Thought and Institutions*. Bombay: University of Bombay.
5. काणे, पी. वी., (1966–1973), *धर्मशास्त्र का इतिहास* (1–4 भाग, अनु. अर्जुन चौबे काश्यप), लखनऊ : उत्तर प्रदेश हिन्दी संस्थान।
6. Jayaswal, K. P. (1967). *Hindu Polity*. Bangalore: Bangalore Press.
7. Prasad, Beni. (1968). *Theory of Government in Ancient India*. Allahabad: Central Book Depot.
8. विद्यालङ्कार, सत्यकेतु, (1968), *प्राचीन भारतीय शासन व्यवस्था और राजशास्त्र*, मैसूर : सरस्वती सदन।
9. Jha, M. N. *Modern Bharatiya Political Thought*. Meerut, UP: Meenakshi Prakashan.
10. Bhandarkar, D. R. *Some Aspects of Ancient Bharatiya Hindu Polity*. Banaras: Banaras Hindu University.
11. Sharma, R. S. (1996). *Aspects of Political Ideas and Institutions in Ancient India*. Delhi: Motilal Banarsidass.
12. Mehta, V. R. (1999). *Foundations of Bharatiya Political Thought*. Delhi: Manohar Publishers.
13. Altekar, A. S. (2001). *State and Government in Ancient India*. Delhi: Motilal Banarsidass.
14. Jayaswal, Suvira. (2004). *वर्ण तथा जाति व्यवस्था : उद्भव तथा विकास*.
15. Mathur, A. D. (2006). *Medieval Hindu Law*. New Delhi: Oxford University Press.
16. Lingat, Robert. *Classical Hindu Law*.

**Credits - 4**

**Hours - 60**

## MD (G) 11: Web Application Development for Sanskrit

**Course Objectives:**

1. To introduce web page development techniques using Sanskrit and other Indian languages.
2. To develop practical skills in creating multilingual web applications with a focus on Sanskrit content.
3. To encourage the use of modern digital tools for the preservation and promotion of Sanskrit.
4. To bridge the gap between classical language learning and contemporary digital platforms.

**Learning outcomes:**

After the completion of the course, the students will:

1. Learn the basic concepts of web page development.
2. Learn the basic concepts about HTML, CSS and Java Scripts.
3. Learn the basic concepts of Typing tools in Devanagari Unicode.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical / Practice | |
| MD (G) 11 | Web Application Development for Sanskrit | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Brief Introduction to Web Applications for Sanskrit.**

- Front End.
- Web Server .
- Back End.

**Unit II Front End and Back End development in Sanskrit.**

- Basics of Hyper Text Markup Language (HTML)
- Basics of Cascading Style Sheets (CSS)
- Basics of Data storage (files)
- Basics of Data Bases.

**Unit III Web Servers.**

- Basics JavaScript's (JS)
- Basics of Python .

**Unit IV Typing Tools for Unicode Devanagari (Sanskrit)**

- Computer program for typing.
- Online typing tools.
- Voice typing tools.
- Mobile Typing.

**Essential/Recommended Readings/Texts:**

1. Chandra, S. (2017). मशीनी अनुवाद *(Machine Translation)*. New Delhi, India: Vidya Nidhi Prakashana.
2. Chandra, S. (2021). भाषासंगणन *(Language Computing)*. New Delhi, India: Upasana Publications.
3. Various e-resources and online tools suggested by teachers. *(Specific URLs or titles should be provided for proper referencing.)*

**Additional readings:**

1. HTML Tutorial - W3Schools: https://www.w3schools.com/html/
2. CSS Tutorial - W3Schools: https://www.w3schools.com/css/default.asp
3. JS Tutorial - W3Schools: https://www.w3schools.com/js/default.asp
4. Python Tutorial- W3Schools: https://www.w3schools.com/python/default.asp
5. SQL Tutorial- W3Schools: https://www.w3schools.com/sql/default.asp

Credits - 4

Hours - 60

## MD (G) 12: Computer Applications for Sanskrit

**Course Objectives:**

1. Introduce current research and developments in the field of Sanskrit computing.
2. Focus on tools and techniques developed with both government and private funding.
3. Explore new technologies for Sanskrit and their applications.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Gain an overview of computational works undertaken in Sanskrit.
2. Understand how computational linguistics (CL) systems can handle a range of practical tasks in Sanskrit.
3. Learn how CL tools can enhance the learning and teaching process in Sanskrit.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 12 | Computer Applications for Sanskrit | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Interactive Sanskrit Teaching Learning Tools.**

- Introduction to Interactive Sanskrit Learning Tools.
- Importance of Interactive Tools for Sanskrit.
- E-learning and its significance for Sanskrit.
- Basics of Multimedia.
- Development of Web-based Tools, including HTML and Web pages.
- Overview of Tools and Techniques for Sanskrit education.

**Unit II Standard for Indian Languages (Unicode)**

- Introduction to Unicode and its role in Indian languages.
- Unicode Typing in Devanagari Scripts.
- Overview of Typing Tools and Software for Sanskrit.

**Unit III Text Processing and Preservation Tools.**

- Text Processing Techniques for Sanskrit.
- Preservation Techniques for Sanskrit texts.
- Survey of Text Processing Tools and Preservation Tools.

**Unit IV Optical Character Reader (OCR)**

- Introduction to Optical Character Reader (OCR) for Sanskrit.

- Applications of OCR for Sanskrit and other Indian languages.
- Overview of OCR Tools and Techniques used for Sanskrit texts.
- Survey of OCR technologies for Sanskrit texts preservation and processing.

**Essential/Recommended readings/Texts:**

1. Teacher's notes, ppt and handout.
2. Bharti, A., Sangal, R., & Chaitanya, V. (1990). *NL, complexity theory and logic. In Foundations of Software Technology and Theoretical Computer Science* (pp. [page numbers if available]). Springer.
3. E-Content suggested by Teacher
4. Tools developed by Computational Linguistics Group, Department of Sanskrit, University of Delhi, Delhi-110007 available at: http://sanskrit.du.ac.in
5. Basic concept and issues of multimedia: http://www.newagepublishers.com/samplechapter/001697.pdf
6. Content creation and E-learning in Indian languages: a model: http://eprints.rclis.org/7189/1/vijayakumarjk_01.pdf
7. HTML Tutorial - W3Schools: www.w3schools.com/html
8. The Unicode Consortium: http://unicode.org/.

**Credits - 4**

**Hours - 60**

## MD (G) 13: Indian Scientific Heritage

**Course Objectives:**

1. Introduce students to the rich scientific concepts embedded in ancient Sanskrit literature.
2. Highlight the significant contributions of India to the fields of Science and Technology in ancient times.
3. Encourage critical engagement with primary Sanskrit sources related to scientific knowledge.
4. Foster awareness and appreciation of India's scientific heritage.
5. Inspire students to explore traditional knowledge systems with a research-oriented mindset.
6. Develop analytical skills to assess ancient scientific ideas in the context of modern science.

**Learning Outcomes:**

After the completion of the course, the students will:

1. The students will be able to exhibit their understanding of Indian scientific Heritage and Indian Knowledge system.
2. they will get acquainted with some aspects of Indian scientific Heritage.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 13 | Indian Scientific Heritage | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I**

- Water Management System in Ancient India.
- Water management in Indus Valley civilization.
- Eleven types of Water in yajurveda (yajurveda 22.25)
- Role of flora and fauna in recharging of underground water.
- Methods of water purification (Brihatsamhita, 54. 121-122, Vriksaayurveda, 2.36-38)

**Unit II**

- Climatology in Sanskrit Literature.
- History of Climatology in Ancient India.
- Climatology in Sanskrit Literature.
- Meteorology in Vedic Period (Rigveda, 1.19.7, 1.37.11, 1.164.47, 5.62.1, 5.63.1-7)

**Unit III**

- Ancient Indian Calendar Systems.
- Division of Time in Vedic Literature – Day, Month, Season, Year, (Rigveda, 1.25.8, 1.64.11, Taittriya Samhita, 1.4.14, 4.4.11)

- Concept of Ritu and samvatsara in Brahmana text (Taittriya Brahmana 3.10.4, Satapatha Brahmana 1.6.3)
- Calculation of yuga, ayana, tithi and naksatra in Vedang Jyotisha (Yajusha Jyotisha, verses 5,9,19-20)

**Unit IV**

- Vedic Mathematics.
- Concept and praise of Mathematics in Vedic Literature (Chandogyopanishad, 7.1.2, 7.1.4; Vedanga Jyotish (Yasushi Jyotisha 4)
- Numerical words in Samhita Texts (Rigveda, 1.164.2, 1.164.10-15)
- Concept of Zero (Rigveda, 4.11.2, 5.32.1, 8.91.7, Brihadaranyakopnishad, 5.1.1, Chandogyopanishad, 4.10.5), Decimal system (Rigveda,10.94.7), Numbers in vedas (Yajurveda, 17.2)
- Development of Geometry in Sulbha period (Sulbhasutra, 1.37)

**Essential/Recommended readings/Texts:**


1. Chakravarthy, A. K. (1975). Origin and development of Indian calendrical science. *Indian Studies: Past and Present*, Calcutta, pp. 1–18.
2. Sharma, K. V. (1985). *Vedāṅga Jyotiṣa of Lagadha*. New Delhi: Indian National Science Academy, pp. 11–16.

**Credits - 4**

**Hours - 60**

## MD (G) 14: Vedanga Jyotisha and Scientific Wisdom

**Course Objectives:**

1. To teach the students the fundamentals of ancient astronomy.
2. To introduce the calculation of time according to traditional methods.
3. To explain the Vedic calendar system and its significance.
4. To provide an overview of the history and development of Indian astrology.
5. To familiarize students with the various branches of Indian astrology.
6. To offer a brief introduction to the contributions of ancient ācāryas in this field.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Be able to understand the ancient Indian methods of astronomical calculation.
2. Be able to comprehend the development and structure of the traditional calendar system.
3. Gain insight into the importance and relevance of astrology in daily life.
4. Understand the underlying concepts and significance of the *Pañcāṅga* (Hindu almanac).

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 14 | Vedanga Jyotisha and Scientific Wisdom | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I**

- Purpose and Benefits of Astronomical Calculations, Importance of Mathematics and the Rule of Three (Lagadha's Jyotisha (Yājusha Jyotisha) – Padya Saṅkhyā: 1, 2, 3, 4, 42–43 = 6 padyas.)
- Vedic Mathematics, Five Sutras by Swami Shri Bharati Krishna Tirtha Maharaj.
- Pāribhāṣika śabdāvalī –

  **(Mathematics):**
  - Types of Mathematics.
  - Abstract Mathematics.
  - (Bījagaṇita) – Algebra.
  - (Kalan) – Calculus.
  - (Saṅkhyā Siddhānta) – Number Theory.

  **(Applied Mathematics):**
  - (Gativijñāna) – Kinematics / Dynamics.
  - (Sthitivijñāna) – Statics.
  - (Khagol Vijñāna) – Astronomy / Celestial Mechanics.

  **(Mathematical Terms):**
  - Number (Saṅkhyā)
  - Digit (Aṅka)
  - Zero (Śūnya)
  - Infinity (Ananta)

- Decimal (Daśamalava)
- Square (Varga)
- Square Root (Vargamūla)
- Cube (Ghana)
- Cube Root (Ghanamūla)
- Hypotenuse (Śara / Karṇa)
- Arc (Chāpa)
- Angle (Koṇa)
- (Rajju) – Line or Rope (used for measuring; also refers to straight line)
- Sine (Trigonometric) (Jya)
- Cosine (Koṭijyā)
- Tangent (Sparśajyā)
- Volume (Āyatana)
- Root (Mūla)
- Surd (Irrational Root) (Karaṇī)
- Equation (Samīkaraṇa)

**Unit II**

- ***General Introduction to the Pañcāṅga (Hindu Calendar Elements):***
    - **Tithi** – *Lunar Day*
    - **Vāra** – *Weekday*
    - **Nakṣatra** – *Lunar Constellation*
    - **Yoga** – *A specific combination of Sun and Moon's positions*
    - **Karaṇa** – *Half of a Tithi (used in determining auspicious times)*

- Āryabhaṭṭīyam – Āryabhaṭa's Golapāda **(Verses 1–22)**
    - From Verse: "Meṣādeḥ katyāntam ... se svadhiyā ca kālasamam" (मेषादेः कत्यान्तम् .... से स्वधिया च कालसमम्) up to 11th verse
    - Description of the Earth and Celestial Sphere *(Bhoogola)*
    - Description of Astronomy (*Khagola)*

**Unit III**

- A Brief History of Indian Mathematics and Astronomy.
- Vedāṅga Jyotiṣa One of the earliest Indian texts on astronomy, part of the Vedāṅgas.

- Śulba Sūtras – Ancient texts dealing with geometry, especially for altar construction.
- Pañcasiddhāntikā –"The Five Astronomical Canons", a work by Varāhamihira summarizing five earlier astronomical systems.
- Sūrya Siddhānta – A foundational Sanskrit text on Indian astronomy.
- Brahmagupta – 7th-century mathematician and astronomer known for his work on zero and arithmetic operations.
- Śrīdharācārya – Mathematician known for contributions to algebra, including methods for solving quadratic equations.
- Āryabhaṭa II – A later astronomer and mathematician, not to be confused with the earlier Āryabhaṭa.
- Śrīpati – Mathematician and astrologer active in the 11th century.

- Bhāskarācārya (Bhāskara II) – 12th-century mathematician known for his works Līlāvatī and Bījagaṇita*
- Gaṇeśa Daivajña – Medieval astronomer and commentator on earlier works.
- Kamalākara – 17th-century astronomer known for his astronomical treatises.
- Jai Singh (Sawai Jai Singh II) – 18th-century king and astronomer, known for constructing observatories (Jantar Mantar) in India.

**Unit IV**

- Major Ancient Yajñas (Sacrificial Rituals) and Observatories for Astronomical Calculations
- Nāḍīvalaya Yantra – Equinoctial Dial
- Yāmyottarīya Turīya Yantra – Instrument for measuring meridional altitude (North-South quadrant instrument)
- Samrāṭ Yantra (Samrāṭ-Palabha Yantra) – The "King of Instruments"; a large sundial used for accurate time measurement
- Śaṅku Yantra – Gnomon or shadow instrument for altitude measurement
- Tārāmaṇḍala – Celestial Sphere or Planetarium
- Chakra Yantra – Circular instrument for astronomical observations
- Yāmyottara Dharātalīya Turīya Yantra – Meridian ground quadrant instrument
- Krāntivṛtta Yantra – Ecliptic ring instrument used to measure celestial latitude and longitude
- Tulā-Karka-Makara Rāśi Valaya Yantra – Zodiacal ring instrument for Libra, Cancer and Capricorn signs
- Ṣaṣṭhāṁśa Yantra – Sextant-type instrument (divides the sky into sixths for measurement)
- Jaipur Observatory (Jantar Mantar) – Constructed by Maharaja Jai Singh II
- Kashi Observatory (in Varanasi) – Traditional center for astronomical studies
- Jantar Mantar (Delhi) – Another major observatory built by Jai Singh II for precise astronomical observations

**Essential/Recommended Readings/Texts:**


1. Aryabhata, (Aryabhatiya of Aryabhata: With the Commentary of Bhaskara I and Somesvara) (K, S, Shukla, Ed,), New Delhi: Indian National Science Academy.
2. कपिलेश्वर शास्त्री, *सूर्यसिद्धान्तः श्री तत्त्वामृतभाष्योपपत्ति टिप्पणी सहित*, वाराणसी: चौखम्बा संस्कृत संस्थान।
3. लगधाचार्य सोमाकरः, *लगधज्योतिषः याजुष् व आर्य संस्करण*, (टीका - सुधाकर भाष्य, लघुविवरण संस्कृत टीका, सान्वयानुवाद व हिन्दी टीका - डा, पुनीता शर्मा), दिल्ली: नाग पब्लिशर्स।
4. Bharati Krishna Tirthaji Maharaja, *Vedic Mathematics*, Delhi: Motilal Banarsidass.

**Credits - 4**

**Hours - 60**

## MD (G) 15: Sustainable Development and Bharatiya Gyanaparampara

**Course Objectives:**

1. To introduce the concept of Sustainable Development within the framework of *Bharatiya Gyana Parampara* (Indian Knowledge Tradition).
2. To explore the philosophical, ecological and ethical dimensions embedded in traditional Indian knowledge systems.
3. To examine the integration of *Bharatiya Gyana Parampara* with modern sustainability practices and global environmental concerns.
4. To foster critical thinking and a holistic understanding for the practical implementation of sustainable models rooted in Indian traditions.
5. To elaborate on the philosophical foundations that inform the Indian approach to sustainability and environmental harmony.
6. To highlight traditional ecological practices aimed at preserving natural resources and upholding sustainability across generations.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Define the Bharatiya concept of sustainability and state means of upholding it consistently.
2. Describe various dimensions of the traditional Bharatiya concept of sustainability.
3. Enlist the prominent principles that constitute the conceptual foundation of Bharatiya sustainability.
4. Identify the influence of prakriti puja, jal-sanrakshan, ahimsa, aparigraha, animal welfare and others in perpetuating sustainability.
5. Expose the role of nature conservation movements like Chipko, Bishnoi, Sacred groves and so and their place in ensuring sustainability.
6. Compare the traditional and modern means of sustainability and their acceptability among masses.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 15 | Sustainable Development and Bharatiya Gyana-parampara | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Understanding Sustainable Development.**

- Definition, Origin and Evolution.
- Key concepts: Environment, Economy, Equity, Ethics.
- United Nations Sustainable Development Goals (UN-SDGs)
- Challenges to sustainability: Climate change, inequality, resource depletion.

**Unit II Philosophical Foundations in Bharateeya Gyana Parampara.**

- Concepts of *Ṛta*, *Dharma*, *Yajña* and *Loka-saṅgraha.*
- Environmental ethics in the Vedas, Upanishads and Smṛti texts.
- Non-anthropocentric worldviews: *Sarvaṃ khalvidaṃ brahma*, *Vasudhaiva Kutumbakam.*
- Ahimsa and interconnectedness in Jainism and Buddhism.

**Unit III Ecology and Sustainability in Classical Texts and Practices.**

- Environmental consciousness in Itihasa-Purana literature.
- Traditional water management, agriculture and architecture: Stepwells, Vṛkṣāyurveda, Vāstu.
- Indigenous practices in forest conservation and animal welfare.
- Case studies: Bishnoi movement, Chipko, Sacred groves.

**Unit IV Synthesizing BGP and Modern Sustainability Models.**

- Gandhian thought and sustainable development.
- Integral humanism (Deendayal Upadhyay) and holistic development.
- National Education Policy (NEP 2020) and promotion of BGP for sustainability.
- Re-imagining education, economics and governance through Indic frameworks.

**Essential/Recommended Readings/Texts:**

1. Radhakrishnan, S. (1923). *Indian Philosophy (Vol. I & II)*. London: George Allen & Unwin Ltd., Ruskin House; New York.
2. Gandhi, M. K. (1933). *Hind Swaraj*. Ahmedabad: Navajivan Publishing House.
3. Chandra, L. (1990). *Cultural Horizons of India*. Delhi: Aditya Prakashan.
4. Balasubramanian, D., et al. (2002). *Traditional Ecological Knowledge for Managing Biosphere Reserves in South and Central Asia*. UNESCO.
5. Chattopadhyaya, D. P. (Ed.). (2002). *History of Science, Philosophy and Culture in Indian Civilization (Vols. on Nature and Culture)*. New Delhi: Centre for Studies in Civilization.
6. Kapoor, K. (2005). *Indian Knowledge System*. New Delhi: D. K. Printworld (P) Ltd.
7. Shiva, V. (2009). *Staying Alive: Women, Ecology and Development*. New Delhi: Women Unlimited.
8. Upadhyay, D. (2014). *Integral Humanism*. Delhi: Hindi Sahitya Sadan.
9. Ministry of Human Resource Development. (2020). *National Education Policy 2020*. Government of India.
10. Debroy, B. (Ed.). (2019). *The Bhagavad Gita for the Modern World*. UK: Penguin Classics.

**Additional Readings:**

1. उपाध्याय, बलदेव. (2010). वैदिक साहित्य और संस्कृति. वाराणसी : शारदा संस्थान।
2. उपाध्याय, बलदेव. संस्कृत वाङ्मय का बृहद् इतिहास (प्रथम भाग: वेद). लखनऊ : उत्तर प्रदेश संस्कृत संस्थान्।

Credits - 4
Hours - 60

## MD (G) 16: Śodhapaddhatiḥ evaṃ Tantrayuktayāḥ

**Course Objectives:**

1. To understand the fundamental concepts of research (*śodha*) and its significance.
2. To familiarize with traditional and modern methods of research including qualitative and quantitative approaches.
3. To introduce classical Indian frameworks such as *tantrayukti*-s in the context of research methodology.
4. To develop skills in formulating research problems, hypotheses, sampling techniques and data analysis.
5. To equip students for academic research through practical tools like proposal writing, referencing and manuscript studies.

**Learning Outcomes:**

After completion of the course, the students will:

1. Define the basic terms and significance of research and types of research.
2. Identify research problems and formulate hypotheses and sampling techniques.
3. Differentiate between qualitative and quantitative research methods.
4. Apply various classical and modern research methods in real-world contexts.
5. Develop a research proposal, perform critical proofreading and documentation.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 16 | Śodhapaddhatiḥ evaṃ Tantrayuktayāḥ | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Foundations of Research.**

- Concept and need of *śodha* (research), research through scientific method.
- *Śodhopāgama*: *Pratyakṣavāda* (positivism) and *Uttarapratyakṣavāda* (post-positivism).
- Research Problem: identifying research area, literature review, selection and delimitation of problem.
- Research Design (*śodhabhikalpa*): experimental, quasi-experimental, pseudo-experimental, correlational.
- Types of Research: *maulika* (fundamental), *vyāvahārika* (applied), *kriyātmaka* (action), *guṇātmaka* (qualitative), *mātrātmaka* (quantitative).

**Unit II Research Tools and Process.**

- Research Questions and Hypothesis (*śodha-praśna*, *prāk-kalpana*): concepts and types.

- Variables (*cara*): Concept and types.
- Population (*janasaṅkhyā*): concepts and types.
- Sampling Methods (*pratidarśana*): types, qualities, probable and non-probable sampling.
- Qualitative and Quantitative Data Collection: questionnaire, schedule, interview, observation, scaling, projective methods.
- Research Process: major sequential steps of research.

**Unit III Research Methods Qualitative Research.**

- Objectives, need and methods of qualitative research.
- Dārśanika vidhī (Philosophical)
- Aitihāsika vidhī (Historical)
- Prajātika vidhī (Ethnographic)
- Vyaktivṛttādhyayana vidhī (Case study)
- Vikāsātmaka adhyayana vidhī (Developmental): longitudinal and cross-cultural studies.
- Viśleṣaṇa vidhī (Analytical): content and document analysis.

*(Concept, need, characteristics and steps of each)*

**Quantitative Research:**

- Objectives, need and methods of quantitative research.
- Prayogika vidhī (Experimental): laboratory and field experiments.
- Ghaṭanottara vidhī (Ex post facto)
- Sarvekṣaṇa vidhī (Survey): descriptive and correlational.
- Sandarbha vidhī (Contextual).

*(Concept, need, characteristics and steps of each)*

**Śāstrīya śodha**

**Unit IV Advanced Research Types.**

- Vimarśātmaka śodha (Critical Research)
- Viśleṣaṇātmaka śodha (Analytical Research)
- Tulanātmaka śodha (Comparative Research)
- Antaḥśāstrīya śodha (Inter-disciplinary Research)
- Bahuśāstrīya śodha (Multi-disciplinary Research)

(Concept, need, characteristics and steps of each)

**Unit V Research Documentation.**

- Proofreading.
- Diacritical Marks.
- śodha-prastāva (Research Proposal)
- sandarbha grantha sūcī (Bibliography)
- Critical edition methodology (samīkṣātmaka saṃskaraṇa)

- pāṇḍulipi vijñāna (Manuscriptology)

**Unit VI Tantrayuktayāḥ**.

- Utility of Tantrayuktayāḥ.
- Introduction & nature of Tantrayuktayāḥ.
- Tantrayuktayāḥ for Knowledge Generation.
- Tantrayuktayāḥ in Critical Analysis.
- Tantrayuktayāḥ in determining the meaning of scriptures.
- Tantrayuktayāḥ in debates & discourses.

**Essential/Recommended Readings/Texts:**


1. Kumar, R. *Research methodology: A step-by-step guide for beginners*. SAGE Publications.
2. Creswell, J. W. *Research design: Qualitative, quantitative and mixed methods approach*. SAGE Publications.
3. Booth, W. C., Colomb, G. G., & Williams, J. M. *The craft of research*. University of Chicago Press.
4. Melville, S., & Goddard, W. *An introduction to research methodology*. Juta & Company.
5. Priest, G. *Logic: A very short introduction*. Oxford University Press.

**Credits - 4**
**Hours - 60**

**Sanskrit Version**

## MD (G) 16: शोधपद्धतिः तन्त्रयुक्तयश्च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. अनुसन्धानस्य (शोधस्य) मौलिकसङ्कल्पनायाः महत्त्वम् अवबोधश्च।
2. पारम्परिक-आधुनिक-पद्धतिभिश्च गुणात्मक-मात्रात्मक-अनुसन्धानस्य परिचयः।
3. शोधपद्धतिसन्दर्भे तन्त्रयुक्तीनां शास्त्रीयभारतीयरूपरेखायाः परिचयः।
4. शोधसमस्या-परिकल्पना-न्यादर्शनप्रविधि-दत्तांशविश्लेषणादीनां निर्माणकौशलस्य विकासः।
5. प्रस्तावलेखन-सन्दर्भीकरण-पाण्डुलिपि-अध्ययनमित्यादीनां व्यावहारिकसाधनानां माध्यमेन शैक्षणिकसंशोधनार्थं छात्राणां सन्नद्धीकरणम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. अनुसन्धाने प्रयुज्यमानानां मूलभूतपदानां, अनुसन्धानस्य प्रमुखानां सिद्धान्तानां तथा अनुसन्धानस्य महत्त्वञ्च निरूपयितुं शक्ष्यन्ति।
2. शोधसमस्यानां परिज्ञानं सम्पाद्य परिकल्पनायाः न्यादर्शनप्रविधेश्च सूत्रीकरणक्षमतां सम्पादयिष्यन्ति।
3. गुणात्मक-मात्रात्मक-संशोधन-विधिषु भेदस्य परिज्ञानं कर्तुं शक्ष्यन्ति।
4. वास्तविक-जगतः सन्दर्भेषु विविध-शास्त्रीय-आधुनिक-संशोधन-विधीन् ज्ञास्यन्ति।
5. शोधप्रस्तावस्य विकासः, समीक्षात्मकं पाठपरीक्षणञ्च (Proof Reading) कर्तुं शक्ष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् ((Credit Distribution of the Course)) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| MD (G) 16 | शोधपद्धतिः तन्त्रयुक्तयश्च | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. अनुसन्धानस्य (शोधस्य) मौलिकता।**

- अनुसन्धानस्य कल्पना आवश्यकता चेति।
- वैज्ञानिकपद्धत्या शोधः।
- शोधोपागमः, प्रत्यक्षवादः, उत्तरप्रत्यक्षवादश्च।

- शोधसमस्या - शोधक्षेत्रस्य सम्बद्धसाहित्यस्य च अध्ययनम्, समस्यायाः चयनं सीमाङ्कनञ्च।
- शोध-अभिकल्पः- प्रयोगात्मकः, अर्द्धप्रयोगात्मकः, मिथ्याप्रयोगात्मकः, सहसम्बन्धात्मकश्चेति (Research Design (*Śodhabhikalpa*): experimental, quasi-experimental, pseudo-experimental, correlational.)
- शोधस्य प्रकाराः – मौलिक-व्यावहारिक-क्रियात्मक-गुणात्मक-मात्रात्मकशोधाश्च।

**अन्वितिः २. शोधस्य उपकरणानि तत्प्रक्रियाश्च।**

- शोधप्रश्नः, प्राक्कल्पना - सम्प्रत्ययः तत्प्रकाराश्च।
- चरः - सम्प्रत्ययः तत्प्रकाराश्च।
- जनसङ्ख्या (न्यादर्शः) - सम्प्रत्ययः तत्प्रकाराश्च।
- प्रतिदर्शनविधयः - प्रतिदर्शः प्रतिदर्शनञ्च, प्रतिदर्शस्य गुणाः, सम्भावितः असम्भावितश्च।
- गुणात्मक-मात्रात्मकयोः प्रदत्तांशयोः सङ्कलनम्, प्रश्नावली, अनुसूची, साक्षात्कारः, निरीक्षणम्, मापनम्, परियोजनाविधयश्चेति।
- शोधप्रक्रिया - शोधस्य प्रमुखसोपानस्य क्रमबद्धता।

**अन्वितिः ३. गुणात्मकशोधः।**

- गुणात्मकशोधस्य उद्देश्यम्, आवश्यकता विधयश्च।
- दार्शनिकविधिः।
- ऐतिहासिकविधिः।
- प्रजातिकविधिः (Ethnographic)
- व्यक्तिवृत्ताध्ययनविधिः (Case study)
- विकासात्मक-अध्ययन-विधिः- अनुदैर्घ्य-अध्ययनमथ च अन्तस्सांस्कृतिकमध्ययनम्।
- विश्लेषणविधिः - विषयवस्तुविश्लेषणम्, अभिलेखविश्लेषणम्।

*(एतेषां विधीनामर्थः, आवश्यकता, विशेषता, अथ च सोपानानि)*

**अन्वितिः ४. मात्रात्मकशोधः।**

- मात्रात्मकशोधस्य उद्देश्यम्, आवश्यकता विधयश्च।
- प्रायोगिकविधिः- प्रयोगशालायां प्रयोगाः, क्षेत्रप्रयोगश्च (Field Experiment)
- घटनोत्तरविधिः (Ex post facto)
- सर्वेक्षणविधिः - वर्णनात्मकः सहसम्बन्धात्मकश्च।

- सन्दर्भविधिः (Contextual)

*(एतेषां विधीनाम् अर्थः, आवश्यकता, विशेषता अथ च सोपानानि)*

**अन्वितिः ५. शोधस्य प्रकाराः।**

- शास्त्रीयशोधाः - एतेषां विधीनाम् अर्थः, आवश्यकता, विशेषता अथ च सोपानानि)
- विमर्शात्मकः शोधः (Critical Research)
- विश्लेषणात्मकः शोधः (Analytical Research)
- तुलनात्मकः शोधः (Comparative Research)
- अन्तःशास्त्रीयः शोधः (Inter-disciplinary Research)
- बहुशास्त्रीयः शोधः (Multi-disciplinary Research)
- पाठसंशोधनम् (Proof Reading), विशेषकचिह्नानि (diacritical mark) शोधप्रस्तावः, सन्दर्भग्रन्थसूची, समीक्षात्मकसंस्करणस्य विधयः, पाण्डुलिपिविज्ञानम्। स्वाध्यायपरियोजना प्रस्तुतिश्चेति।

**अन्वितिः ६. तन्त्रयुक्तयः।**

- तन्त्रयुक्तीनाम् उपयोगिता।
- तन्त्रयुक्तीनां परिचयः स्वरूपञ्च।
- ज्ञानसिद्ध्ये तन्त्रयुक्तयः।
- विवेकनिर्णये तन्त्रयुक्तयः।
- शास्त्रार्थनिर्णये तन्त्रयुक्तयः।
- वादविवादेषु साधनत्वेन तन्त्रयुक्तयः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. Kumar, R. *Research methodology: A step-by-step guide for beginners*. SAGE Publications.
2. Creswell, J. W. *Research design: Qualitative, quantitative and mixed methods approaches*. SAGE Publications.
3. Booth, W. C., Colomb, G. G., & Williams, J. M. *The craft of research*. University of Chicago Press.
4. Melville, S., & Goddard, W. *An introduction to research methodology*. Juta & Company.
5. Priest, G. *Logic: A very short introduction*. Oxford University Press.

Credits - 4
Hours - 60

## MD (G) 17: Arts, Science and Mathematics in Ancient India

**Course Objectives:**

1. To provide an overview of the diverse traditions of Indian arts, including classical music, dance, drama and painting.
2. To explore ancient Indian concepts of astronomy, energy, physics and atomic theory.
3. To introduce the contributions of Indian scholars in mathematics and their influence on the global mathematical tradition.
4. To explain Indian numeral systems and key mathematical concepts like zero, Pi and units of measurement.

**Learning Outcomes:**

After completion of the course, the students will:

1. Identify and describe major forms of classical and regional Indian arts.
2. Explain scientific ideas such as atomic motion, gravitational theory and electromagnetic radiation from Indian texts.
3. Recognize contributions of Indian mathematicians and texts in global mathematics.
4. Analyze Indian number systems, concepts of Śūnya, Pi, Kaṭapayādi and trigonometric calculations.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 17 | Arts, Science and Mathematics in Ancient India | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I General Introduction to Indian Arts.**

- Catuḥṣaṣṭi Kalā (Sixty-four arts)
- Nāṭyaśāstra and Abhinayadarpaṇa.
- Various styles of classical Indian music.
- Styles of Indian classical dance.
- Regional styles of painting.
- Other regional arts.

**Unit II Astronomy.**

- Science of Avināśī Urjā (indestructible energy) in the Upaniṣads.
- Motion of atoms through Agni (fire)
- Science of electromagnetic waves.
- Electromagnetic radiation.
- Electricity, speed of Prakāśa.
- Laws of motion.

- Theory of attraction.
- Theory of gravity,atom.

**Unit III Indian Mathematics.**

- History of Mathematical Sciences.
- History of mathematics and contributions of Indians in the field of mathematics.
- Introduction to major treatises.
- Global impact of Indian mathematical sciences and principles.

**Unit IV Indian Mathematics.**

- The Āryabhaṭīya and Kaṭapayādi system.
- Concept of Śūnya (zero)
- Units of Bhū-māpa (land measurement)
- Indian concepts regarding the calculation of the value of pi (π).

**Essential/Recommended Readings/Texts:**


1. Bharata Muni. *Nāṭyaśāstra*.
2. Nandikeśvara. *Abhinayadarpaṇa*.
3. Shukla, K. S., & Gupta, R. C. *History of Indian mathematics*.
4. Āryabhaṭa. *Āryabhaṭīya*.
5. Dixit, S. B. (Trans.). *Surya Siddhānta*.
6. Sharma, P. V. *Classical texts of Ayurveda*.
7. Kothari, D. S. *Science and the Indian tradition*.
8. Basham, A. L. *The wonder that was India*.


**Online Resources:**

- https://sanskritdocuments.org
- https://indianculture.gov.in
- https://iks.iitgn.ac.in
- https://bharatiyavidya.indicacademy.org

**Credits - 4**
**Hours - 60**

## Sanskrit Version

### MD (G) 17: प्राचीनभारते कला विज्ञानं गणितं च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. शास्त्रीयसङ्गीत-नृत्य-नाटक-चित्रकलानां समावेशपूर्वकं भारतीयकलायाः विविधपरम्पराणां च विहङ्गावलोकनम्।
2. खगोलशास्त्रेण ऊर्जया भौतिकशास्त्रेण परमाणुसिद्धान्तेन च सम्बद्धानां प्राचीनभारतीयावधारणानाम् गवेषणम्।
3. गणितशास्त्रे भारतीयविदुषां योगदानं तथा वैश्विकगणितपरम्परायां तेषां प्रभावस्य परिचयप्रदानम्।
4. भारतीयसंख्याप्रणालीनां तथैव शून्यं, Pi, मापनैककाः इत्यादीनां प्रमुखगणितीयसम्प्रत्ययानां व्याख्यानम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः -

1. प्रमुखशास्त्रीय-क्षेत्रीय-भारतीयकलायाः रूपाणां परिचयवर्णनयोः च समर्थाः भविष्यन्ति।
2. भारतीयग्रन्थेभ्यः परमाणुगतिः, गुरुत्वाकर्षणसिद्धान्तः, विद्युच्चुम्बकीयविकिरणम् इत्यादयः वैज्ञानिकविचाराणां व्याख्यानं करिष्यन्ति।
3. वैश्विकगणितशास्त्रे भारतीयगणितज्ञानां ग्रन्थानां च योगदानस्य अवगाहनं करिष्यन्ति।
4. भारतीयसंख्याप्रणाल्याः, शून्यं, पाई(Pi), कटपयादी, त्रिकोणमितीयगणना चेत्यादीनाम् अवधारणानां विश्लेषणं करिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् ((Credit Distribution of the Course)) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| MD (G) 17 | प्राचीनभारते कला विज्ञानं गणितं च | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course):**

**अन्वितिः १. भारतीयकलानां सामान्यपरिचयः।**

- चतुःषष्टिकलाः।
- नाट्यशास्त्रम् अभिनयदर्पणञ्च।
- भारतीयशास्त्रीयसंगीतस्य विभिन्नशैल्यः।
- भारतीयशास्त्रीयनृत्यशैल्यः।

- चित्रकलानां चित्रीकरणस्य विभिन्नाः क्षेत्रीयशैल्यः।
- अन्याः क्षेत्रीयकलाः।

**अन्वितिः २. भारतीयविज्ञानम्।**

- भारतीयखगोलविज्ञानस्य परिचयः।
- उपनिषत्सु अविनाशी-उर्जायाः विज्ञानम्।
- अग्निना परमाणुगतिः।
- विद्युच्चुम्बकीयतरंगस्य विज्ञानम्।
- विद्युच्चुम्बकीयविकिरणानि।
- विद्युतः प्रकाशस्य च वेगः।
- गतिनियमाः।
- आकर्षणस्य सिद्धान्तः।
- गुरुत्वाकर्षणसिद्धान्तः।

**अन्वितिः ३. भारतीयगणितम्।**

- भारतीयगणितीयविज्ञानस्य इतिहासः।
- गणितक्षेत्रे भारतीयानां योगदानम्।
- प्रमुखगणितीयग्रन्थानां परिचयः।
- भारतीयगणितीयविज्ञानस्य भारतीयगणितसिद्धान्तानां च वैश्विकप्रभावः।

**अन्वितिः ४. भारतीयगणितम्।**

- आर्यभटीयगणितप्रणाली।
- कटपयादिसूत्रम्।
- शून्यस्य अवधारणा।
- भू-मापनस्य एककाः।
- pi (π) मूल्यस्य गणनायां भारतीयावधारणाः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. Bharata Muni. *Nāṭyaśāstra*.
2. Nandikeśvara. *Abhinayadarpaṇa*.
3. Shukla, K. S., & Gupta, R. C. *History of Indian mathematics*.
4. Āryabhaṭa. *Āryabhaṭīya*.

5. Dixit, S. B. (Trans.). *Surya Siddhānta*.
6. Sharma, P. V. *Classical texts of Ayurveda*.
7. Kothari, D. S. *Science and the Indian tradition*.
8. Basham, A. L. *The wonder that was India*.


**सहायकाः ग्रन्थाः (Additional Readings)**


1. https://sanskritdocuments.org
2. https://indianculture.gov.in
3. https://iks.iitgn.ac.in
4. https://bharatiyavidya.indicacademy.org

Credits - 4

Hours - 60

## MD (G) 18: Kauṭliya Arthaśāstra - Society & Citizen

**Course Objectives:**

1. To introduce the socio-political perspectives of Kauṭilya's Arthaśāstra.
2. To explore the duties and rights of citizens from Kauṭilya's viewpoint.
3. To understand the structure of ancient Indian administration, penal code and the role of espionage.
4. To evaluate the relevance of Kauṭilya's thought in contemporary contexts.
5. To examine ethical and administrative principles based on Kauṭilya's political philosophy.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the foundational structure and relevance of the Arthaśāstra.
2. Analyze Yogakṣema, Saptāṅga and Ṣāḍguṇya policies.
3. Evaluate Rājadharma and Rājamaṇḍala as models of governance.
4. Interpret philosophical foundations with reference to key textual excerpts.
5. Compare ancient welfare models with modern policy frameworks.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 18 | Kauṭliya Arthaśāstra - Society & Citizen | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I**

- The importance of the Arthaśāstra.
- General introduction to the topics described in Arthaśāstra.

**Unit II**

- Yogakṣema (Four diplomatic strategies)
- Saptāṅga (Seven essential elements)
- Ṣāḍguṇya (The sixfold policy)

**Unit III**

- Rājadharma (the duty of the king) as the cultural foundation (command/principle) of modern statecraft.
- Rājamaṇḍala (the circle of kings) as the cultural foundation (command/principle) of modern statecraft.
- Dharma as the cultural foundation (command/principle) of modern statecraft.

- Study of the core philosophical thinking in the Arthaśāstra (Include relevant text excerpts)

**Unit IV**

- Measures for the welfare of all as prescribed in various texts of the Indian knowledge system and policies related to republicanism and statecraft.

**Essential/Recommended Readings/Texts:**

1. वेङ्कटनाथाचार्य (सम्पा.). (१९६०). *कौटलीयार्थशास्त्रम्*. मैसूर : प्राच्यविद्या संशोधनालय, मैसूर विश्वविद्यालय।
2. Shamasastry, R. *Kautilya's Arthashastra*.
3. Rangarajan, L. N. *The Arthashastra: A new annotated translation*.
4. Vibhu Academy. *Kautilya's Arthashastra: A study*.

**Credits - 4**
**Hours - 60**

**Sanskrit Version**

## MD (G) 18: कौटिलीयम् अर्थशास्त्रं - समाजः नागरिकाश्च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. कौटिलीय-अर्थशास्त्रस्य आधारेण सामाजिकराजनैतिकदृष्टीनाम् अवबोधः।
2. कौटिल्यदृष्ट्या नागरिक-कर्त्तव्यानाम् अधिकाराणां च अन्वेषणम्।
3. प्राचीनभारतीयप्रशासनस्य संरचनायाः, दण्डसंहितायाः, गुप्तचराणां भूमिकायाः च अवबोधः।
4. समसामयिकसन्दर्भेषु कौटिल्यस्य विचाराणां प्रासंगिकतायाः मूल्याङ्कनम्।
5. कौटिल्यस्य राजनैतिकदर्शनाधारितानां नैतिक-प्राशासनिकसिद्धान्तानां परीक्षणम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनं विधाय छात्राः -

1. अर्थशास्त्रस्य आधारभूतसंरचनां प्रासंगिकतां च निरूपयिष्यन्ति।
2. योगक्षेमयोः, सप्ताङ्गानां, षाड्गुण्यानां नीतिविश्लेषणं कर्तुं शक्ष्यन्ति।
3. आदर्शशासनरूपेण राजधर्म-राजमण्डलयोः मूल्याङ्कनं करिष्यन्ति।
4. प्रमुखपाठ्यांशसन्दर्भे दार्शनिक-आधाराणां व्याख्यां करिष्यन्ति।
5. प्राचीनकल्याणकर (welfare) - प्रतिमानानाम् आधुनिकनीतिरूपरेखाभिः सह तुलनात्मकं चिन्तनं करिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् ((Credit Distribution of the Course)) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| MD (G) 18 | कौटिलीयम् अर्थशास्त्रं - समाजः नागरिकाश्च | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १.**

- अर्थशास्त्रस्य महत्त्वम्।
- अर्थशास्त्रे वर्णितविषयाणां सामान्यपरिचयः।

**अन्वितिः २.**

- योगक्षेमौ (राजनीतेः चतुर्विधव्यूहाः)
- सप्ताङ्गानि (राज्यस्य सप्तप्रभागाः)
- षड्गुणाः।

**अन्विति: ३.**

- आधुनिकशासनस्य सांस्कृतिकमूलाधारत्वेन राजधर्माः।
- आधुनिकशासनस्य सांस्कृतिकमूलाधारत्वेन राजमण्डलम्।
- आधुनिकशासनस्य सांस्कृतिकमूलाधारत्वेन धर्मः।
- अर्थशास्त्रे मूलभूत-दार्शनिकचिन्तनानाम् अध्ययनम्।

**अन्विति: ४.**

- भारतीयज्ञानपरम्परायाः विविधग्रन्थेषु वर्णिताः सर्वेषां हितकराः उपायाः, लोकतन्त्र-शासनकलासम्बद्धाः नीतयश्च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. वेङ्कटनाथाचार्य (सम्पा.). (१९६०). *कौटलीयार्थशास्त्रम्*. मैसूर : प्राच्यविद्या संशोधनालय, मैसूर विश्वविद्यालय।
2. Shamasastry, R. *Kautilya's Arthashastra*.
3. Rangarajan, L. N. *The Arthashastra: A new annotated translation*.
4. Vibhu Academy. *Kautilya's Arthashastra: A study*.

**Credits - 4**
**Hours - 60**

## MD (G) 19: Envisaging Viksit Bharat: Perspectives and Challenges

**Course Objectives:**

1. To familiarize youth with the concept of Viksit Bharat.
2. Enabling them to identify its key pillars and respond to the challenges and expectations associated with its vision.
3. To develop an understanding of the dynamics of transformation essential for shaping India into a Viksit Bharat.

**Learning Outcomes:**

After completion of the course, the students will:

1. Comprehend the vision and perspective of Viksit Bharat.
2. Understand different aspects of Indian economy and society.
3. Analyze dimensions for inclusive and sustainable Bharat.
4. Instill a sense of national pride and optimism in one's own life.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 19 | Envisaging Viksit Bharat: Perspectives And Challenges | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Viksit Bharat @2047: A Determination.**

- Concept of Viksit Bharat.
- Indian perspective of Development.
- Sarve Bhavantu Sukhinah.

**Unit II Transforming the Nation.**

- PM Gati-Shakti National Master Plan.
- Energy: Conventional and Non-Conventional.
- Digital Transformation; E-Governance.

**Unit III Empowering Farmers and Youth.**

- Increasing Farmers Income: Strategies and Challenges.
- Non-Farm Rural Sector.
- Manufacturing Sector; Start-ups and Entrepreneurship.

**Unit IV Sustainable and Inclusive Bharat.**

- SDGs and Climate Challenges.
- Women led Development.

- India as a Soft Power.
- Shiksha se Sarvodaya.

**Practical Exercises:**

1. Field Activities/ Practical and Hands-On Components.
2. Regular class activities must be conducted throughout the course to enhance students' understanding of topics and the application of concepts. The case study method may be followed as a teaching pedagogy.
3. After the introductory class (first unit), Off-campus visit(s) should be scheduled to places like MSME, village, Self-Help Groups, Farmers Organisations, Infrastructure Projects, Industries, Weekly Bazars etc. The purpose of such visits is to begin the curriculum with real-life experiences. Students should be guided to observe and experience the real-world happenings and search for improvement opportunities. Suitable pedagogy for off-campus visits: Observation, Prototyping, Experimentation, Testing, Selection and Communication.
4. After the completion of second unit, a group project activity is to be given to apprehend the practical application of the concepts. It may include finding a problem in the industry/villages/infrastructure projects, observe how the initiatives of Viksit Bharat may be applied, finding gaps and recommendations for effective implementation of the policies.
5. After the completion of fourth unit, group projects are to be allotted to cognize students' understanding and make them competent to apply the philosophy of Viksit Bharat in real-life situations.

**Essential/Recommended Readings/Texts:**


1. Khanna, S., & Moorthy, P. (2017). Analysing India's soft power functioning in the twenty-first century. *India Quarterly, 73*(3), 292–311.
2. Vashisht, S. (Ed.). (2021). *Atma Nirbhar Bharat: Towards a self-reliant India*. Prabhat Prakashan.
3. Gupta, A., & Gurumurthy, S. (Eds.). (2021). *Aatmanibhar Bharat: A vibrant and strong India*. Aryan Books International.
4. Kumar, S. (2023). Development strategy for future India and Atmanirbhar Bharat: A way forward. *Contemporary World Economy Journal, 1*(4).
5. Government of India. (2023). *Economic survey 2023*. Ministry of Finance.
6. Rao, T. C. (2024). *The architects of Viksit Bharat*. Prabhat Prakashan.

**Credits - 4**
**Hours - 60**

## MD (G) 20: Computational Linguistics for Sanskrit

**Course Objectives:**

1. To introduce the concept of Computational Linguistics for Sanskrit and highlight its necessity for sustaining the language in the contemporary digital age.
2. To familiarize students with modern technologies and advancements in the fields of computational linguistics and language technology.
3. To facilitate the development of computational thinking and skills required to apply Sanskrit in various technological contexts.
4. To develop students' proficiency in the tools and techniques of computational linguistics, thereby enhancing their employability and potential for entrepreneurship.
5. To build technical dexterity in areas such as databases, database systems and the architecture of database systems relevant to Sanskrit language processing.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Describe the theoretical concepts of Computational Linguistics and its coherence with Sanskrit.
2. State the basic concepts of the various applied areas of Computational Linguistics.
3. Distinguish among Morphological analyzer, Speech Recognition, Speech synthesis, Text to Speech, Language analysis and so.
4. Write short notes on Natural language Interface, Language processing Text Processing and Machine Translation etc.
5. Apply the basic concept of databases for data Storage and survey of Computational Linguistics.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (G) 20 | Computational Linguistics for Sanskrit | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Theoretical Concepts of Computational Linguistics.**

- Language and Communication.
- Levels of Language.
- Phonemes.
- Morphemes.
- POS.

- Lexicon.
- Syntax.
- Semantics.
- Discourse.
- Natural Language vs Artificial Language.
- Speech and Language.
- Grammars. Computer Intelligent Interaction (HCII).
- Human Processing of Languages vs Computer Processing of Natural Languages.
- Rule based vs Statistical Processing.
- Machine Learning.
- Annotation of Language.
- Standards.
- Unicode and Language Resources.

**Unit II Survey of the Sanskrit Computational Linguistics.**

- Historical Evolution of Sanskrit Computational Linguistics.
  - Early computational approaches to Sanskrit (e.g., Panini's grammar, formal systems).
  - Key developments and research milestones.
- Major Tools and Projects.
  - Sanskrit Morphological Analyzers, POS Taggers, Sandhi Splitters.
  - Key projects like Sanskrit-Hindi Machine Translation (SHMT), Sanskrit WordNet, Shabda-Bodha.
- Key Contributors and Research Centers.
  - Contributions from JNU, IITs, Rashtriya Sanskrit Sansthan and individual researchers like G.N. Jha, Gérard Huet and Amba Kulkarni.
- Challenges and Future Directions.
  - Linguistic complexities (e.g., Sandhi, compounding).
  - Emerging trends: machine learning, deep learning, digital Sanskrit libraries, AI applications.

**Unit III Applied Areas of Sanskrit Computational Linguistics**.

- Morphological Analyzer.
- Speech/Speaker Recognition.
- Speech Synthesis.
- Text to Speech.
- Language Analysis.
- Language Understanding.
- Language Generation.
- Natural Language Interface.
- Text Processing.

- Machine Translation.

**Unit IV Data Storage.**

- An Introduction to Databases.
- Databases and Database Systems.
- Architecture of Database Systems.
- Historical Perspective of Database Systems.
- Basics of MS SQL Database.

**Essential/Recommended Readings/Texts:**

1. Grishman, R. (1986). *Computational Linguistics: An introduction*. Cambridge University Press.
2. Gazdar, G., & Mellish, C. (1989). *NLP in Prolog*. Wokingham: Addison Wesley.
3. Gazdar, G., & Mellish, C. (1989). *NLP in Lisp*. Wokingham: Addison Wesley.
4. Bharti, A., Sangal, R., & Chaitanya, V. (1990). NL, Complexity Theory and Logic. In *Foundations of Software Technology and Theoretical Computer Science*. Springer.
5. Grosz, B. J., et al. (Eds.). (1990). *Readings in NLP*. Los Angeles: Morgan Kaufmann.
6. Dan Jurafsky, & Martin, J. H. (2000). *Speech and Natural Language Processing*. Prentice Hall.
7. Mitkov, R. (2005). *Oxford Handbook of Computational Linguistics*. Oxford University Press.
8. Chandra, Subhash. (2017). मशीनी अनुवाद *(Machine Translation)*. Vidya Nidhi Prakashana, New Delhi, India.
9. Kenneth, A. Lambert. (2011). *Fundamentals of Python: First Programs*. Cengage Learning.
10. Nath Jha, Girish (Ed.). (2010). *Sanskrit Computational Linguistics*. Springer Verlag, Germany.
11. Chandra, Subhash. (2021). भाषासंगणन *(Language Computing)*. Upasana Publications, New Delhi, India.
12. Elmasri, R., & Navathe, S. B. *Fundamentals of Database Systems* (5th Ed.). Pearson Education.

**Additional Readings:**

1. Grishman, R. (1986). *Computational linguistics: An introduction*. Cambridge University Press.
2. Huet, G., Kulkarni, A., & Scharf, P. (Eds.). (2009). *Sanskrit computational linguistics: 1st and 2nd international symposiums* (LNCS 5402). Springer.
3. Kulkarni, A., & Huet, G. (Eds.). (2009). *Sanskrit computational linguistics: 3rd international symposium* (LNCS 5406). Springer.
4. Chandra, S., & Jha, G. N. (2012). *Computer processing of nominal inflections in Sanskrit: Methods and implementations*. CSP.

**Credits - 4**
**Hours - 60**

## MD (G) 21: Sanskrit and Computational Linguistics

**Course Objectives:**

1. To introduce Sanskrit's grammatical and linguistic richness as a foundation for computational modeling.
2. To develop the understanding of computational linguistics and its integration with Sanskrit language technology.
3. To equip students with skills in tools such as morphological analyzers, syntactic parsers and machine translation.
4. To foster computational thinking with real-world applications of Sanskrit in the digital age.

**Learning Outcomes:**

After completion of the course, the students will:

1. Describe core linguistic structures of Sanskrit relevant to computation (phonemes, morphemes, syntax, semantics).
2. Explain foundational concepts of computational linguistics and their applicability to Sanskrit.
3. Demonstrate familiarity with computational tools: morphological analyzers, TTS systems, databases and text processing.
4. Apply language resources and standards (e.g., Unicode, annotated corpora) in Sanskrit processing.
5. Develop a small-scale project (e.g., basic morphological analyzer for Sanskrit).

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (G) 21 | Sanskrit and Computational Linguistics | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Foundations of Sanskrit Linguistics & Language Technology.**

- Sanskrit phonology, morphology, syntax, semantics.
- Levels of language (from Panini to modern NLP)
- Natural vs artificial languages, discourse, context.
- Unicode standards, annotation of Sanskrit texts.

**Unit II Computational Linguistics Concepts.**

- Overview of NLP, rule-based and statistical methods.

- Human vs machine processing of natural language.
- Machine learning, annotations, corpora, standards.

**Unit III Applied Computational Tools for Sanskrit.**

- Morphological analyzers, syntactic parsers for Sanskrit.
- Speech/speaker recognition, text-to-speech for Sanskrit.
- Sanskrit language analysis and generation tools.
- Machine translation (Sanskrit↔Hindi/English)

**Unit IV Data and Language Resources for Sanskrit.**

- Introduction to databases (MS SQL) for Sanskrit text storage.
- Data architectures for language resources.
- Survey of Sanskrit corpora and lexical resources.

**Essential/Recommended Readings/Texts:**

1. Jurafsky, D., & Martin, J. H. (2009). *Speech and language processing* (2nd ed.). Prentice Hall.
2. Jha, G. N. (Ed.). (2010). *Sanskrit computational linguistics*. Springer.
3. Chandra, S. (2021). भाषासंगणन, Upasana Publications.

**Credits - 4**
**Hours - 60**

## MD (G) 22: Applied Sanskrit Computational Linguistics

**Course Objectives:**

1. To bridge classical Sanskrit grammar (Vyakarana) with computational processing techniques.
2. To train students in the architecture and application of language technology tools for Sanskrit.
3. To integrate database systems with Sanskrit NLP applications.
4. To encourage digital scholarship and research in Sanskrit computational studies.

**Learning Outcomes:**

After completion of the course, the students will:

1. Compare classical grammatical frameworks (Paninian) with computational models.
2. Design simple applications like a text analyzer or transliterator for Sanskrit.
3. Analyze performance of language technology tools (morphological analyzers, POS taggers) on Sanskrit data.
4. Integrate Sanskrit textual data into databases for NLP purposes.
5. Present research findings in the field of Sanskrit computational linguistics.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (G) 22 | Applied Sanskrit Computational Linguistics | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Classical Grammar Meets Computation.**

- Overview of Panini's grammar and its relevance to NLP.
- Parsing Sanskrit syntax using computational tools.
- Encoding Sanskrit rules into computational frameworks.

**Unit II Tools & Techniques.**

- Morphological analyzers, lemmatizers, POS tagging.
- Speech synthesis, text-to-speech systems for Sanskrit.
- Sanskrit-specific challenges in computational linguistics.

**Unit III Data and Resources.**

- Database architectures (MS SQL, Oracle) for Sanskrit data.
- Corpus creation, annotation and language resources.

- Standards for Sanskrit text encoding (Unicode, XML).

**Unit IV Project Development & Applications.**

- Hands-on project: design a simple computational tool (e.g., Sanskrit lemmatizer, transliterator)
- Presentation of findings in workshops/conferences.
- Exploration of entrepreneurship in Sanskrit language technology.

**Essential/Recommended Readings/Texts:**


1. Grishman, R. (1986). *Computational linguistics: An introduction*. Cambridge University Press.
2. Huet, G., Kulkarni, A., & Scharf, P. (Eds.). (2009). *Sanskrit computational linguistics: 1st and 2nd international symposia proceedings* (LNCS 5402). Springer.
3. Chandra, S. (2017). मशीनी अनुवाद, Vidya Nidhi Prakashana.

# POOL OF MULTIDISPLINARY COURSES (Sanskrit Disciplines)

श्रेयोऽङ्काः - 4
होराः - 60

## MD (S) 1: भारतीयं गणितशास्त्रम्

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. गणिते भारतीयानां योगदानस्य अध्ययनम्।
2. कालानुगुणं भारतीयगणितशास्त्रस्य, ज्योतिश्शास्त्रेण सह गणितशास्त्रस्य च विकासस्य अवगमनम्।
3. प्रमुखज्योतिषाचार्याणां तद्ग्रन्थानां च परिचयप्राप्तिः।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :–

1. प्राचीनकाले गणितशास्त्रस्य स्वरूपम् अधिगन्तुं समर्थाः भविष्यन्ति।
2. ऐतिहासिकदृष्ट्या गणितशास्त्रस्य क्रमिकविकासं प्रतिपादयितुं सक्षमाः भविष्यन्ति।
3. भारतीयैः शुद्धगणितस्य अनुप्रयुक्तगणितस्य च प्रक्रियाः कथम् उपन्यस्ताः इत्यस्मिन् विषये अन्यान् प्रबोधयितुं पटवः भविष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 1 | भारतीयं गणितशास्त्रम् | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्विति: १. भारतीयगणितशास्त्रस्य सामान्यपरिचयः।** **श्रेयोऽङ्कः १**

- वेदेषु गणितस्य प्रयोगाः।
- महाभारते रामायणे पुराणे च गणितस्य उल्लेखाः।
- संख्यास्थानानि।
- भारते संख्यासूचकपद्धतयः (भूतसंख्यापद्धतिः)।
- कटपयादिसंख्यापद्धतिः।
- आर्यभटीयसंख्यापद्धतिः।
- गणितीयपरिकर्मणां व्यवहाराणां च सामान्यपरिचयः।

**अन्वितिः २. प्रसिद्धाः गणितशास्त्रज्ञाः तेषाम् उपादेयता च।** **श्रेयोऽङ्कः १**

- आर्यभटः।
- वराहमिहिरः।
- ब्रह्मगुप्तः।
- लल्लः।
- मुञ्जालः।
- श्रीपतिः।

**अन्वितिः ३. प्रसिद्धाः गणितशास्त्रज्ञाः तेषाम् उपादेयता च।** **श्रेयोऽङ्कः १**

- भास्कराचार्यः।
- कमलाकरः।
- ज्ञानराजः।
- जगन्नाथः।
- गणेशदैवज्ञः।
- वेङ्कटेशकेतकरः च।

**अन्वितिः ४. केरलीयगणितशास्त्रपरम्परा।** **श्रेयोऽङ्कः १**

- माधवः।
- परमेश्वरः।
- नीलकण्ठः।
- चित्रभानुः।
- ज्येष्ठदेवः।
- शङ्करवारियरः।
- नारायणः।
- अच्युतपिशारटिः।
- पुदुमनसोमयाजिप्रभृतीनां केरलीयगणितज्ञानां गणितशास्त्रीययोगदानस्य चिन्तनम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. भास्कराचार्य, (1931), *लीलावती* (Ed. Giriraj Prasad Dwivedi), Newul Kishor Printing Press.
2. Dahal, A. L., (2005), *भारतीयज्योतिश्शास्त्रस्य इतिहासः*, Choukhambha Krishnadas Academy.
3. Heroor, V. D., (2016), *The history of mathematics & mathematicians of India*, SAKSHI.
4. संस्कृतसंवर्धनप्रतिष्ठानम्, (2022), *भारतीय गणित परम्परा*, नवदेहली।
5. Ray, P. P., (2023), *The great mathematicians of Bharat*, Rajmangal Publishers.

**सहायकाः ग्रन्थाः (Additional Readings)**

1. Prasad, G. (1956). *भारतीय ज्योतिश्शास्त्र का इतिहास*, Lucknow: Uttar Pradesh Sarkar।
2. Sarma, K. V. (1977). *Contributions to the study of the Kerala School of Hindu Astronomy and Mathematics (INSA-TP-40)*. New Delhi: Indian National Science Academy.
3. Shastri, N. (2014). *भारतीय ज्योतिष*. Delhi: Bharatiya Jnanapitha।

श्रेयोऽङ्काः - 4
होराः - 60

## MD (S) 2: भारतीयगणितशास्त्रे परिकर्माणि

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारमानानां दूरमानानाम् अर्थमानानां (मुद्राणां), धान्यमानानां च प्राचीनपरिभाषाविज्ञानम्।
2. गणितीयपरिकर्मणाम् अध्ययनम्।
3. गुणन-भजन-वर्ग-वर्गमूलादिपरिकर्मणाम् अवगमनम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :–

1. प्राचीनकाले भारतदेशे मानानां स्वरूपं कीदृशमासीत् इति अधिगन्तुं समर्थः भविष्यति, तद्द्वारा ऐतिहासिकदृष्ट्या भारतीयजीवनपद्धतिविषये शोधं कर्तुं प्रभविष्यन्ति।
2. गुणनादिपरिकर्मणां भेदान् प्रतिपादयितुं सक्षमाः भविष्यन्ति।
3. गणितीयानि उदाहरणानि काव्यशास्त्रदृष्ट्या व्याख्यातुं पटवः भविष्यन्ति।
4. गणितं भारतीयानां व्यवहारे कथम् अनुप्रयुक्तम् आसीत् इत्यस्मिन् विषये अन्यान् प्रबोधयितुं शक्ष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 2 | भारतीयगणितशास्त्रे परिकर्माणि | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. अभिन्नपरिकर्माष्टकम्।** **श्रेयोऽङ्कः १**

- मानपरिभाषाः।
- सङ्कलनादिघनमूलपर्यन्तानि परिकर्माणि च।

**अन्वितिः २. भिन्नपरिकर्माष्टकं, शून्यपरिकर्म, व्यस्तविधिः इष्टकर्म च।** **श्रेयोऽङ्कः १**

- भिन्नराशिस्वरूपम्।
- भिन्नराशेः परिकर्माणि।
- भिन्नराशौ जातिचतुष्टयम्।
- खषड्विधम्।

- अनन्तपरिकल्पना।
- व्यस्तकर्म इष्टकर्म च।

**अन्वितिः ३. सङ्क्रमणं, वर्गकर्म, गुणकर्म च।** **श्रेयोऽङ्कः १**

- सङ्क्रमणाख्यं गणितम्।
- वर्गगुणकर्मणी।

**अन्वितिः ४. त्रैराशिकादि।** **श्रेयोऽङ्कः १**

- त्रैराशिकं पाञ्चराशिकं सप्तराशिकं नवराशिकम् एकादशराशिकं भाण्डप्रतिभाण्डकं च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. भास्कराचार्यः, (1931), *लीलावती*, (गिरिराजप्रसादद्विवेदी सम्पा.), लखनऊ : न्यूवलकिशोर प्रिंटिंग प्रेस।
2. नारायणपण्डितः, (1936), *गणितकौमुदी*, (गोपीनाथकविराजः, पद्माकरद्विवेदी च सम्पादकौ), वाराणसी : तारा प्रिंटिंग वर्क्स।
3. (2022), *भारतीयगणितपरम्परा*, नवदेहली : संस्कृतसंवर्धनप्रतिष्ठानम्।


**सहायकाः ग्रन्थाः (Additional Readings)**


1. महावीराचार्यः, (1912), *गणितसारसङ्ग्रहः*, (M. Rangacharya सम्पा.), मद्रास : गवर्नमेंट प्रेस।
2. महावीराचार्यः, (1963), *गणितसारसङ्ग्रहः*, (L.C. Jain सम्पा.), शोलापुर : जैन संस्कृत संरक्षण संघः।
3. (1975), *लीलावती (क्रियाक्रमकरीव्याख्योपेता)*, (K.V. Sarma सम्पा.), होशियारपुर : विशेश्वरानन्द वैदिक शोध संस्थान।
4. आर्यभटः, (1976), *आर्यभटीयम्*, (K.S. Shukla, K.V. Sharma सम्पादकौ), दिल्ली : INSA।
5. श्रीधराचार्यः, (2004), *त्रिशतिका*, दिल्ली : राष्ट्रीयसंस्कृतसंस्थानम्।

**श्रेयोऽङ्काः - 4**
**होराः - 60**

## MD (S) 3: भारतीयपरम्परायां कालगणनापद्धतिः

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. नवविधकालमानानां परिचयप्राप्तिः, तेषां परिगणनाक्रमज्ञानं च।
2. विविधशकवर्षाणां परिज्ञानम्।
3. कल्पादितः अभीष्टकालं यावत् गतवर्षाणां गणनाक्रमविशेषज्ञानम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :–

1. पञ्चाङ्गप्रारूपं विज्ञाय भारतीयानां "Calander System" सम्पूर्णं खगोलाश्रितम् अत्यन्तं वैज्ञानिकं सूक्ष्मं च वर्तते इति प्रतिपादने कुशलाः भविष्यन्ति।
2. पूजादिषु शुभकर्मसु सङ्कल्पकरणावसरे सृष्ट्यादितः अभीष्टदिनं यावत् गतानि वर्षाणि मासाः तिथयश्च कथं निरूप्यन्ते इति ज्ञात्वा अस्मत्सनातनसम्प्रदाये कालगणनाक्रमस्य अविच्छिन्नपरम्पराम् अनुवर्तयितुम् अन्यान् बोधयितुं च सक्षमाः भविष्यन्ति।
3. सौर-सावन-चान्द्र-नाक्षत्रमानानां स्वरूपम् अवगत्य तेषां पारस्परिकं सम्बन्धं प्रतिपादयितुं समर्थाः भविष्यन्ति।
4. पैत्र-दैव-मनु-गौरव-ब्राह्ममानानि गणयितुं तदुपयोगं प्रतिपादयितुं च समर्थाः भविष्यन्ति।
5. दिन-मास-वर्ष-युग-महायुग-मन्वन्तर-कल्पमानानाम् अध्ययनेन कालगणनायां भारतीयज्ञानपरम्पराम् अधिगन्तुं पटवः भविष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 3 | भारतीयपरम्परायां कालगणनापद्धतिः | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. कालपरिभाषा, सौरादीनां मानानां स्वरूपं प्रयोजनं च।** **श्रेयोऽङ्कः १**

- कालस्य स्थूलसूक्ष्मभेदः।
- सौर-सावन-चान्द्र-नाक्षत्र-पितृ-दिव्य-मनु-बार्हस्पत्य-ब्राह्मकालमानानां प्रवृत्तिविज्ञानं च।

**अन्वितिः २. क्षेत्रपरिभाषा, ग्रहभगणाः च।** **श्रेयोऽङ्कः १**

- भगणपरिभाषा।
- युगे कल्पे च ग्रहाणाम् उच्चादीनां भगणाः नक्षत्रभ्रमणानि।

**अन्वितिः ३. अवम-अधिमासयोः स्वरूपम्।**

- सावनदिनानि।
- चान्द्रमासाः, अधिमासाः, क्षयदिनानि च।

**अन्वितिः ४. कल्पादितः/ सृष्ट्यादितः गतकालानयनं पञ्चाङ्गावलोकनक्रमः च।** **श्रेयोऽङ्कः १**

- कल्पादिसृष्ट्याद्योः भेदः।
- गतवर्षानयनम्।
- अहर्गणानयनम्।
- पञ्चाङ्गं दृष्ट्वा संवत्सर-मासादिव्यवस्थाज्ञानम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. Kapileshvara Shastri (Ed.), (1946), *सूर्यसिद्धान्तः (तत्त्वामृतटीकोपेतः)*, वाराणसी : चौखम्बा संस्कृत सीरीज़ कार्यालय।
2. Bhaskaracharya, (1995), *सिद्धान्तशिरोमणिः (वासनाभाष्योपेतः)*, वाराणसी : चौखम्बा संस्कृत भवन।


**सहायकाः ग्रन्थाः (Additional Readings)**


1. Dwivedi, S. (Ed.), (1991), *सिद्धान्ततत्त्वविवेकः*, वाराणसी : चौखम्बा सुरभारती प्रकाशन।
2. Mishra, B. (Ed.), (1932), *सिद्धान्तशेखरः*, कलकत्ता : कलकत्ता यूनिवर्सिटी प्रेस।
3. Sharma, R. S. (Ed.), (1966), *ब्राह्मस्फुटसिद्धान्तः*, नई दिल्ली : IIAS रिसर्च।

**श्रेयोऽङ्काः - 4**
**होराः - 60**

## MD (S) 4: बृहद्देवता (प्रथमाध्यायः)

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. देवताविषये ज्ञानप्रदानम्।
2. बृहद्देवतायाः परिचयप्रदानम्।
3. देवतामहत्त्वं, स्तुतिः, सूक्तानां प्रकारः, इत्यादिविषयाणां ज्ञानप्रदानम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. देवताविषयकं परिचयं विधास्यन्ति।
2. बृहद्देवताग्रन्थे प्रतिपादितान् विषयान् व्याख्यास्यन्ति।
3. विभिन्नप्रकारमन्त्रान् वक्ष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 4 | बृहद्देवता (प्रथमाध्यायः) | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. प्रथमश्लोकादारभ्य 31 श्लोकपर्यन्तम्।** **श्रेयोऽङ्कः १**

- देवताज्ञानमहत्त्वम्, स्तुतिः आशीः च।
- सूक्तानां प्रकाराः, देवताविचारः, नाम्नः उत्पत्तिश्च।

**अन्वितिः २. 32 श्लोकादारभ्य 64 श्लोकपर्यन्तम्।** **श्रेयोऽङ्कः १**

- विभिन्नप्रकारमन्त्राः, मन्त्राणामभिव्यञ्जनात्मकपद्धतिः, संज्ञायाः क्रियायाः च।
- परिभाषा, विभिन्नप्रकाराणां मन्त्राणामुदाहरणं, स्थावरजङ्गमानां स्रोतरूपेण प्रजापतिश्च।

**अन्वितिः ३. 65 श्लोकादारभ्य 100 श्लोकपर्यन्तम्।** **श्रेयोऽङ्कः १**

- अग्नेः त्रीणि रूपाणि, वाचः त्रीणि रूपाणि, सूक्तस्य प्रधानदेवता च।
- देवानां नामगणना, अग्नेः इन्द्रवाय्वोः सूर्यस्य च सूक्तानां विशेषता।

- त्रयः अग्नयः, अग्नेः जातवेदसः वैश्वानरस्य च भेदाः।

**अन्वितिः ४. 101 श्लोकादारभ्य 131 श्लोकपर्यन्तम्।** **श्रेयोऽङ्कः १**

- त्रयाणां लोकानां देवताः।
- पार्थिवाग्नेः प्रतिनिधिदेवता, अग्निसम्बद्धाः अन्याः देवताश्च।
- इन्द्रसम्बद्धाः मध्यस्थानीयाः देवताः।
- इन्द्रसम्बद्धाः देवताः दैवीकृतपदार्थाश्च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. Rai, R., (2019), *शौनकीयबृहद्देवता*, वाराणसी : चौखम्बा संस्कृत संस्थान।

श्रेयोऽङ्काः - 4
होराः - 60

## MD (S) 5: वैदिकवाङ्मयस्येतिहासः (संहिताब्राह्मणारण्यकोपनिषत्परिचयः) चरणव्यूहः च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. वैदिकवाङ्मयस्य विस्तृतरूपेण परिचयप्रदानम्।
2. संहिता-ब्राह्मण-आरण्यक-उपनिषदां परिचयप्रदानम्।
3. चरणव्यूहग्रन्थे प्रतिपादितानां विषयाणां परिचयप्रदानम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. वैदिकवाङ्मयस्य ज्ञानं प्राप्स्यन्ति।
2. वैदिकवाङ्मयेतिहासं ज्ञातुं समर्थाः भविष्यन्ति।
3. चरणव्यूहग्रन्थे प्रतिपादितान् विषयान् ज्ञास्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 5 | वैदिकवाङ्मयस्येतिहासः (संहिताब्राह्मणारण्य-कोपनिषत्परिचयः) चरणव्यूहः च | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. संहिताब्राह्मणभागः।** **श्रेयोऽङ्कः १**

- ऋग्वेदः, ऋग्वेदस्य शाखाः ब्राह्मणानि तेषु प्रतिपादितविषयाश्च।
- शुक्लयजुर्वेदः, शुक्लयजुर्वेदस्य शाखाः, ब्राह्मणानि, तेषु प्रतिपादितविषयाश्च।
- कृष्णयजुर्वेदः, कृष्णयजुर्वेदस्य शाखाः, ब्राह्मणानि, तेषु प्रतिपादितविषयाश्च।
- सामवेदः, सामवेदस्य शाखाः, ब्राह्मणानि, तेषु प्रतिपादितविषयाश्च।
- अथर्ववेदः, अथर्ववेदस्य शाखाः, ब्राह्मणानि, तेषु प्रतिपादितविषयाश्च।

**अन्वितिः २. आरण्यकोपनिषद्भागः।** **श्रेयोऽङ्कः १**

- ऋग्वेदस्य आरण्यकानि, उपनिषदः, तेषां प्रतिपादनविषयाश्च।
- शुक्लयजुर्वेदस्य आरण्यकानि, उपनिषदः, तेषां प्रतिपादनविषयाश्च।

- कृष्णयजुर्वेदस्य आरण्यकानि, उपनिषदः, तेषां प्रतिपादनविषयाश्च।
- सामवेदस्य आरण्यकानि, उपनिषदः, तेषां प्रतिपादनविषयाश्च।
- अथर्ववेदस्य आरण्यकानि, उपनिषदः, तेषां प्रतिपादनविषयाश्च।

**अन्वितिः ३. चरणव्यूहे ऋग्वेदयजुर्वेदखण्डौ। श्रेयोऽङ्कः १**

- महीदासभाष्यसहितः ऋग्वेदखण्डः।
- महीदासभाष्यसहितः यजुर्वेदखण्डः।

**अन्वितिः ४. चरणव्यूहे सामवेदाथर्ववेद-फलश्रुतिखण्डाः। श्रेयोऽङ्कः १**

- महीदासभाष्यसहितः सामवेदखण्डः।
- महीदासभाष्यसहितः अथर्ववेदखण्डः।
- महीदासभाष्यसहितः फलश्रुतिखण्डः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. उमेशचन्द्रशर्मा (संपा०), (1978), *चरणव्यूहसूत्रम्* (आचार्य महिदासकृत भाष्यसहितम्), अलीगढ़: विवेक पब्लिकेशन्स।
2. जगदीशचन्द्रमिश्र, (2018), *वैदिकवाङ्मयस्य इतिहासः*, वाराणसी: चौखम्बा सुरभारती प्रकाशन।


**सहायकाः ग्रन्थाः (Additional Readings)**


1. महर्षि सान्दीपनि राष्ट्रीय वेदविद्या प्रतिष्ठान, (2023), *वेदकल्पतरु*, नई दिल्ली : राष्ट्रीय पुस्तक न्यास।

**श्रेयोऽङ्काः - 4**
**होराः - 60**

## MD (S) 6: वैदिकवाङ्मयस्येतिहासः (वेदाङ्गस्येतिहासः)

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. वैदिकवाङ्मयेतिहासयोः ज्ञानसम्पादनम्।
2. विविधशिक्षाणां परिचयप्रदानम्।
3. वेदाङ्गस्य विस्तृतेन परिचयप्रदानम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. वैदिकवाङ्मयस्येतिहासं वक्तुं समर्थाः भविष्यन्ति।
2. शिक्षासु प्रतिपादितान् विषयान् व्याख्यास्यन्ति।
3. वेदाङ्गानां प्रयोजनानि वक्ष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 6 | वैदिकवाङ्मयस्येतिहासः (वेदाङ्गस्येतिहासः) | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. शिक्षावेदाङ्गेतिहासः।** **श्रेयोऽङ्कः १**

- शिक्षायाः अवश्यकता, इतिहासश्च।
- ऋग्वेद-यजुर्वेदयोः शिक्षाः।
- कृष्णयजुर्वेदस्य शिक्षाः।
- सामवेदस्य शिक्षाः।
- अथर्ववेदस्य शिक्षाः।

**अन्वितिः २. निरुक्तव्याकरणवेदाङ्गेतिहासः।** **श्रेयोऽङ्कः १**

- निरुक्तस्यावश्यकता इतिहासश्च।
- निरुक्ते अध्यायविभागः, निरुक्तव्याख्याकाराश्च।
- व्याकरणशास्त्रस्यावश्यकता।
- व्याकरणस्येतिहासः, व्याकरणपरम्परा, व्याकरणशास्त्रस्य ग्रन्थाः, तेषां व्याख्याः च।

**अन्वितिः ३. छन्दोज्यौतिषवेदाङ्गेतिहासः।** **श्रेयोऽङ्कः १**

- छन्दःशास्त्रस्येतिहासः।
- ज्यौतिषशास्त्रपरम्परा, ज्यौतिषवेदाङ्गस्येतिहासश्च।
- स्कन्धत्रयं, ज्यौतिषग्रन्थाः, तेषां व्याख्याः च।

**अन्वितिः ४. कल्पवेदाङ्गेतिहासः।** **श्रेयोऽङ्कः १**

- कल्पवेदाङ्गस्यावश्यकता, कल्पवेदाङ्गस्य विभागाश्च।
- श्रौतसूत्राणि तेषां व्याख्याः च।
- धर्मसूत्राणि तेषां व्याख्याः च।
- गृह्यसूत्राणि तेषां व्याख्याः च।
- शुल्बसूत्राणि तेषां व्याख्याः च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. जगदीशचन्द्रमिश्र, (2018), *वैदिकवाङ्मयस्य इतिहासः*, वाराणसी : चौखम्बा सुरभारती प्रकाशन।

**सहायकाः ग्रन्थाः (Additional Readings)**

1. महर्षि सान्दीपनि राष्ट्रीय वेद विद्या प्रतिष्ठान, (2023), *वेदकल्पतरु*, नई दिल्ली : राष्ट्रीय पुस्तक न्यास।

**श्रेयोऽङ्काः - 4**
**होराः - 60**

## MD (S) 7: वैदिकाख्यानानि संवादसूक्तानि च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. वैदिकाख्यानानां विस्तृतेन ज्ञानप्रदानम्।
2. वैदिकाख्यानानां सायणभाष्येण सह अध्ययनम्।
3. गार्गी-याज्ञवल्क्यसंवादादीनां शाङ्करभाष्येण सह अध्ययनम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. वैदिकाख्यानानाम् अर्थं वक्ष्यन्ति।
2. वैदिकाख्यानेषु सायणभाष्यस्य तात्पर्यं कथयिष्यन्ति।
3. संवादेषु आत्मतत्त्वं प्रतिपादयिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 7 | वैदिकाख्यानानि संवादसूक्तानि च | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. शुनःशेपाख्यानम् (ऐ. ब्र. 7.13)** **श्रेयोऽङ्कः १**

- मूलभागः, सायणभाष्यञ्च।

**अन्वितिः २. वाङ्मनसोः आख्यानम् (श.ब्रा. 1.4.5.8-13)** **श्रेयोऽङ्कः १**

- मूलभागः, सायणभाष्यञ्च।

**अन्वितिः ३. विश्वामित्रनदीसंवादः (3.33), सरमापणिसंवादश्च (10.108)** **श्रेयोऽङ्कः १**

- मूलभागः, सायणभाष्यञ्च।

**अन्वितिः ४. गार्गी-याज्ञवल्क्यसंवादः, मैत्रेयी-याज्ञवल्क्यसंवादश्च।** **श्रेयोऽङ्कः १**

- मूलभागः, शाङ्करभाष्यञ्च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. *बृहदारण्यकोपनिषद्*, (सानुवाद शाङ्करभाष्यसहित), गोरखपुर : गीताप्रेस।
2. *ऋग्वेदसंहिता*, (सायणभाष्यम्), पुणे : वैदिकसंशोधनमण्डल।
3. डॉ. सुधाकर मालवीय, *ऐतरेयब्राह्मणं*, वाराणसी : तारा प्रिंटिंग वर्क्स।
4. *शतपथब्राह्मणं*, नईदिल्ली : राष्ट्रीयसंस्कृतविश्वविद्यालयः।

श्रेयोऽङ्काः - 4
होराः - 60

## MD (S) 8: ग्रहशान्तिः

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. ग्रहशान्तिमन्त्राणां परिचयप्रदानम्।
2. पञ्चभूसंस्कारस्य विस्तृतेन परिचयसम्पादनम्।
3. अग्निस्थापनं, कुशकण्डिकाप्रयोगः, ग्रहहोमः, इत्यादीनां परिचयप्रदानम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. ग्रहशान्तिमन्त्राणाम् उच्चारणे समर्थाः भविष्यन्ति।
2. अग्निस्थापनं, कुशकण्डिकाप्रयोगः, ग्रहहोमः, पूर्णाहुतिं विधातुं च समर्थाः भविष्यन्ति।
3. ग्रहशान्तिं कर्तुं कारयितुं च समर्थाः भविष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 8 | ग्रहशान्तिः | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १ दिग्रक्षणं, पञ्चभूसंस्काराश्च।** **श्रेयोऽङ्कः १**

- ग्रहशान्तिपूजनादिकर्मणां सम्यक् सम्पादनार्थम् आदौ दशसु दिक्षु मन्त्रोच्चारणानुपूर्वं विधिनिष्पादनम्।
- अग्निप्रतिष्ठापनार्थं स्थण्डिले पञ्चभूसंस्काराः।
- परिसमूहन-उपलेपन-उल्लेखन-उद्धरण-अभ्युक्षणानि इति कर्मणां यथोक्तरीत्या सम्पादनम्।

**अन्वितिः २. अग्निस्थापनम्, ग्रहमण्डलदेवतास्थापनञ्च।** **श्रेयोऽङ्कः १**

- अग्न्याहरण-क्रव्यादाँशक्षेपण-अग्निस्थापन-अग्न्युपसमाधान-आवाहन-प्रतिष्ठापन-पूजनादिकर्माणि।
- सङ्कल्पः - नवानां ग्रहाणाम् अधिदेवता-प्रत्यधिदेवतानां च मन्त्रोच्चारपूर्वकम् आवाहन-स्थापन-पूजनादिकर्माणि।

**अन्वितिः ३. कुशकण्डिका प्रयोगः।** **श्रेयोऽङ्कः १**

- ब्रह्मासनास्तरण-प्रणीताप्रणयन-पात्रासादन-अपाम् उद्दिङ्गन-प्रोक्षण-आज्यनिर्वाप-प्रतपन-आज्यस्य स्थापन-उद्वासन-उत्पवन-अवेक्षण-अपद्रव्यनिरसन-समिद्धोम-अग्नेः प्रदीप्तिकरणादीनि कर्माणि।

**अन्वितिः ४. ग्रहहोमः, बलिदानं, पूर्णाहुतिश्च।** **श्रेयोऽङ्कः १**

- आघारहोम-आज्यभागहोम-द्रव्यत्यागसङ्कल्प-अग्निपूजन-प्रार्थन-प्रधानहोम-गुग्गुलहोम-सर्षपहोम-लक्ष्मीहोम-व्याहृतिहोम-प्रायश्चित्तहोम-उत्तरपूजन-स्विष्टकृद्धोम-नवाहुतिहोमादीनि कर्माणि।
- दिक्पालदेवतानां, स्थापितदेवतानां च कृते पूजनपूर्वकं बलिदानम्। पूर्णाहुतिहोमप्रकरणम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. यज्ञदत्त दुर्गाशंकर शास्त्री, *बृहद्ब्रह्मनित्यकर्मसमुच्चयः*, मुम्बई : जगदीश्वर प्रिंटिंग प्रेस।

**श्रेयोऽङ्काः - 4**
**होराः - 60**

## MD (S) 9: मुहूर्तचिन्तामणिः (संस्कारप्रकरणम्)

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. मुहूर्तचिन्तामणिग्रन्थपरिचयेन सह ज्योतिषशास्त्रस्य परिचयज्ञानप्रदानम्।
2. विविधसंस्काराणां प्रयोजनस्य ज्ञानसम्पादनम्।
3. विविधसंस्कारेषु प्रयुक्तानां मूहुर्त-तिथि-वार-नक्षत्रादीनां परिचयप्रदानम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. ज्योतिषवेदाङ्गस्य परिचयं वक्ष्यन्ति।
2. संस्काराणां स्वरूपं भेदान् च वर्णयिष्यन्ति।
3. मूहुर्तचिन्तामणिग्रन्थस्य संस्कारप्रकरणं ज्ञातुं ज्ञापयितुं च समर्थाः भविष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 9 | मुहूर्तचिन्तामणिः (संस्कारप्रकरणम्) | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. आरम्भतः निन्दितयोगानां परिहारपर्यन्तम्।** **श्रेयोऽङ्कः १**

- तिथीनां स्वामी, तिथीनां संज्ञा शुभाशुभविचाराश्च - (नन्दा, भद्रा, जया, रिक्ता, पूर्णा)
- वासरेषु निषिद्धतिथयः नक्षत्राणि च, तिथ्यनुसारनिषिद्धकर्माणि, दग्ध-विषाख्य-हुतासन-यमघण्टयोगाश्च।
- शून्यतिथयः, तिथ्यनुसारनिन्द्यनक्षत्राणि, चैत्रादिमासेषु शून्यनक्षाणि, चैत्रादिमासेषु शून्यराशयः च।
- प्रतिपदादि-विषमतिथिषु दग्धलग्नानि, पूर्वोक्तानां दुष्टयोगानां परिहारश्च।
- शुभकर्मसु निषिद्धयोगाः, गृहप्रवेश-यात्रा-विवाहेषु क्रमशः वर्जनीयवार-नक्षत्राणि च।
- आनन्दादि-अष्टाविंशतियोगाः।
- दुष्टयोगानां परिहारः।
- रवियोगः, सर्वार्थसिद्धियोगः, उत्पातादि-योगचतुष्टयञ्च।
- निन्दितयोगानां परिहारः।

**अन्वितिः २. सम्पूर्णकृत्येषु वर्जनीयवस्तूनितः शुभाशुभप्रकरणान्तम्। श्रेयोऽङ्कः १**

- सम्पूर्णकृत्येषु वर्जनीयवस्तूनि, सूर्यचन्द्रग्रहणस्य त्याज्यनक्षत्राणि दिनानि च।
- त्याज्यनक्षत्राणि योगाश्च, पक्षरन्ध्रतिथयः तेषां परिहारश्च।
- देशभेदेन होलाष्टकनिषेधः, भद्रादिपरिहारः, भद्राकालश्च।
- शुक्रास्तादिषु वर्जनीयक्रिया।
- लुप्तसंवत्सरदोषः परिहारश्च।
- कालहोरा, कालहोरायाः प्रयोजनञ्च।
- मन्वादि-युगादितिथयः।

**अन्वितिः ३. संस्कारप्रकरणे आरम्भतः मतान्तरेण शुक्रबृहस्पतयोः बाल्यवृद्धत्वपर्यन्तम्। श्रेयोऽङ्कः १**

- प्रथमरजोदर्शने उत्तम-मध्यम-निकृष्टनक्षत्राणि।
- निन्दितप्रथमरजोदर्शनं, प्रथमरजस्वलायाः स्नानमुहूर्तञ्च।
- गर्भाधानमुहूर्तः, गर्भाधाने लग्नबलञ्च।
- सीमन्तोन्नयनमुहूर्तः, गर्भाधानतः प्रसवपर्यन्तं मासस्वामी च।
- पुंसवनमुहूर्तः, जातकर्म-नामकर्ममुहूर्त्ताश्च।
- प्रसूतास्नानमुहूर्तः।
- मासानुसारं दशनोत्पत्तिविचारः।
- दोलारोहणमुहूर्तः।
- जलपूजामुहूर्तः।
- अन्नप्राशनमुहूर्तः, अन्नप्राशनाय लग्नशुद्धिः, अन्नप्राशनमुहूर्ते ग्रहाणां फलञ्च।
- बालानां भूम्योपवेशनमुहूर्तः, बालानां जीविकापरीक्षा च।
- कर्णवेधमुहूर्तः, कर्णवेधे लग्नशुद्धिश्च।
- चौलादिषु निषिद्धकालः।
- शुक्रबृहस्पतेः बाल्यवृद्धावस्था।
- मतान्तरेण शुक्रबृहस्पतयोः बाल्यवृद्धत्वम्।

**अन्वितिः ४. चूडाकर्ममुहूर्ततः केशान्तकर्ममुहूर्तपर्यन्तम्।** **श्रेयोऽङ्कः १**

- चूडाकर्ममुहूर्तः।
- तारादोषस्यापवादः।
- चौलादिसंस्कारेषु निषिद्धकालः।
- साधारणक्षौरादीनां मुहूर्तः निषेधश्च।
- निमित्तवशात् क्षौरकर्म।
- अक्षरारम्भमुहूर्तः।
- विद्यारम्भमुहूर्तः।
- यज्ञोपवीतकालः, यज्ञोपवीतस्य नक्षत्राणि, यज्ञोपवीते लग्नदोषः, यज्ञोपवीतेलग्नगुणाश्च।
- बृहस्पतिबलम्, गुरुदोषापवादश्च।
- यज्ञोपवीते निषिद्धसमयः।
- केन्द्रस्थितानां सूर्यादिग्रहाणां फलम्।
- अनध्यायसंज्ञकतिथयः।
- प्रदोषलक्षणम्।
- यज्ञोपवीतादिषु धर्मशास्त्रविचारः।
- छुरिकाबन्धनमुहूर्तः।
- केशान्तकर्ममुहूर्तः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. चण्डिकाप्रसाद अवस्थी, (2004), *मुहूर्तचिन्तामणि* (टीकाकारः पण्डित रामयत्न अवस्थी), लखनऊ : नवलकिशोरप्रेस।

श्रेयोऽङ्काः - 4
होराः - 60

## MD (S) 10: ऋक्प्रातिशाख्यं सभाष्यम् (संज्ञापरिभाषापटलं, स्वरपटलं च)

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. ऋग्वेदप्रातिशाख्यपरिचयेन सह संज्ञापरिभाषापटलस्य सामान्यरिचयप्रदानम्।
2. विविधसंज्ञापरिभाषाणाम् अर्थसम्पादनम्।
3. विविधसंज्ञापरिभाषाणाम् ऋग्वेदे कुत्र कुत्र उपयोगिता इत्यस्य ज्ञानसम्पादनम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. विविधसंज्ञापरिभाषाणाम् परिचयं वक्ष्यन्ति।
2. विविधसंज्ञापरिभाषाणाम् अर्थसम्पादने समर्थाः भविष्यन्ति।
3. विविधसंज्ञापरिभाषां ज्ञातुं ज्ञापयितुं समर्थाः भविष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| MD (S) 10 | ऋक्प्रातिशाख्यं सभाष्यम् (संज्ञापरिभाषापटलं, स्वरपटलं च) | 04 | 0 | 0 | 04 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. विष्णुमित्रकृतवर्गद्वयवृत्तिः।** **श्रेयोऽङ्कः १**

- मङ्गलाचरणं, शास्त्रावतारश्च।
- शास्त्रस्य सम्बन्धः विषयश्च।
- सूत्रकारस्य प्रतिज्ञा।
- शास्त्रस्य प्रयोजनम्।
- संहितापदक्रमस्वरूपम्।
- वर्णमाला।

**अन्वितिः २. संज्ञापरिभाषापटले प्रातिशाख्यप्रयोजनतः गुरुसंज्ञापर्यन्तम्।** **श्रेयोऽङ्कः १**

- प्रातिशाख्यप्रयोजनम्।

- समानाक्षरसंज्ञा, सन्ध्यक्षरसंज्ञा, स्वरसंज्ञा च।
- इपरप्लुतस्य दीर्घत्वम्।
- अनुस्वारस्वरूपम्।
- व्यञ्जनसंज्ञा, स्पर्शसंज्ञा, वर्गसंज्ञा, अन्तस्थसंज्ञा, ऊष्मसंज्ञा, अघोषसंज्ञा, सोष्मसंज्ञा, अनुनासिकसंज्ञा च।
- पदावसाने प्रथमतृतीयस्पर्शयोः विकल्पः।
- ह्रस्वसंज्ञा, दीर्घसंज्ञा, अक्षरसंज्ञा, गुरुसंज्ञा च।

**अन्वितिः ३. संज्ञापरिभाषापटले अनुस्वारव्यञ्जनयोरङ्गत्वविचारतः रेफिसंज्ञापर्यन्तम्। श्रेयोऽङ्कः १**

- अनुस्वारव्यञ्जनयोरङ्गत्वविचारः।
- ह्रस्वस्वरस्य उच्चारणकालः, अवग्रहस्य उच्चारणकालः, दीर्घस्वरस्य उच्चारणकालः प्लुतस्य स्वरसंज्ञा उच्चारणकालः च।
- प्लुतोदाहरणानि, स्वरभक्तेः पूर्वभाक्त्वं पूर्वाक्षराङ्गत्वं च।
- दीर्घस्वरभक्तेः कालः, व्यञ्जनानां कालः, ह्रस्वस्वरभक्तेः कालश्च।
- रक्तसंज्ञा, संयोगसंज्ञा, वर्णानां स्थानानि, डकारस्थाने ळकारः, ढकारस्थाने हकारश्च।
- परिभाषासूत्राणि, प्रैषाणां पादवत्त्वम्, पदान्तलक्षणम्, सामवशसन्धेरुल्लेखश्च।
- पद्यानां पदवद्भावः, पद्यानां पदवद्भावप्रतिषेधस्थलानि च।
- अवसाने अष्टस्वराणामनुनासिकसंज्ञा।
- एकस्यैव प्लुतस्यानुनासिकसंज्ञा, नामिसंज्ञा च।
- नतिषु नन्तृनम्ययोः पौर्वापर्यम्।
- अरिफितविसर्जनीयस्य सोपधस्यैकवर्णवत्त्वम्।
- प्रगृह्यसंज्ञा, रेफिसंज्ञा च।

**अन्वितिः ४. स्वरपटलम्। श्रेयोऽङ्कः १**

- स्वराणां सङ्ख्या उच्चारणप्रकारश्च।
- स्वराक्षरयोर्धर्मधर्मिसम्बन्धः।
- सन्धौ स्वरितनिष्पत्तिः।
- स्वरितस्य उच्चारणप्रकारः।
- पदे उदात्तपूर्वस्वरितम्, पदे जात्यस्वरितम्, पदे प्रचयस्वरस्य उच्चारणप्रकारश्च।
- उदात्तादिस्वराणां सन्धिः।

- विवृत्तिव्यञ्जनव्यवधानेऽपि स्वरितनिष्पत्तिः।
- सन्धिजस्वरितानां संज्ञासूत्रं, संहितायां प्रचयः स्वरः, तस्य उच्चारणप्रकारश्च।
- परिग्रहे स्वरनिरूपणम्, अवग्रहे स्वरनिरूपणञ्च।
- उत्तरयोः त्रिमात्रयोः अन्यमात्रोच्चारणविषये मतद्वयम्।
- स्वरोच्चारणे केचिद्दोषाः।
- स्वरितविशेषेषु कम्पविधानम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. सं. डा. वीरेन्द्रकुमार वर्मा, *शौनकविरचितं ऋग्वेदप्रातिशाख्यम्* (उव्वटभाष्यसंवलितम्), चौखम्बा संस्कृत प्रतिष्ठान।
2. विष्णुमित्रकृत वर्गद्वयवृत्तिः।

**Credits - 4**
**Hours - 60**

## MD (S) 11: Basic Principles of Āyurveda

**Course Objectives:**

1. To introduce students to Ancient Indian medical practices, especially Ayurveda.
2. To provide foundational knowledge about Ayurvedic principles and treatments.
3. To familiarize students with the historical and cultural significance of Ayurveda.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the basic concepts and philosophy of Ayurveda.
2. Identify and classify various Indian medicinal herbs.
3. Analyze the components and uses of Ayurvedic formulations.
4. Appreciate the significance of ancient Indian medical knowledge.
5. Develop awareness of the practical applications of Ayurveda in modern health and wellness.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (S) 11 | Basic Principles of Āyurveda | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction to Āyurveda.** **Credit 1**

- Definition of Āyurveda.
- Aim of Āyurveda.
- Subject Matter of Āyurveda.
- Salient Features of Āyurveda.
- Concept of Health according to Āyurveda.
- Unique features of Āyurveda.
- History of Āyurveda.
- Introduction to Major Texts (Suśrut Saṁhitā and Caraka Saṁhitā)
- Authors (Suśruta and Caraka)
- Aṣṭāṅga Hṛdayam, Aṣṭāṅga Saṅgraha of Vāgbhaṭa.

**Unit II Basic Principles of Āyurveda.** **Credit 1**

- Triguṇas: Sattva, Rajas and Tamas.
- Pañcamahābhūtas: Ākāśa (Space), Vāyu (Air), Agni (Fire), Jala (Water) and Pṛthvī (Earth).
- Tridoṣas: Vāta, Pitta and Kapha.
- Saptadhātus: Rasa (fluid), Rakta (blood), Māṁsa, Meda (fat), Asthi, Majjā and Śukra.
- Trayodasāgni: Jatharāgni (gastric fire), Saptadhātvāgni and Pācabhātāgni.

- Trimalas: Purīṣā (faeces), Mūtra (urine) and Sveda (sweat).

**Unit III Aṣṭāṅga Āyurveda.** **Credit 1**

- Kāycikitsā (General Medicine)
- Kaumārabhṛtya(Pediatrics)
- śalyatantra (Surgery)
- Śālākya-Tantra (Ent. and Ophthalmology)
- Bhūta Vidyā (Psychiatry Medicine)
- Viṣa Vijñāna (Toxicology)
- Rasāyana (Rejuvenates)
- Vajīkaraṇa (Aphrodisiac)

**Unit IV Important Medicinal Plants based on Āyurveda.** **Credit 1**

- Medicinal Plants in Suśruta Saṁhitā:
- Tulsī.
- Haridrā.
- Sarpagandhā.
- Ghṛta Kumārī.
- Guggulu.
- Brāhmī.
- Āmalā.
- Aśwagandhā.
- Arjun.
- Haldi.
- Neema Plant.
- Jamun.
- Pudina.

**Essential/Recommended Readings/Texts:**


1. Dash, Bhagavan, & Junius, Manfred M., Acarya, Vaidya. (1987), *A Handbook of Āyurveda*, New Delhi: Concept Publishing Co.
2. Srikrishnamurthy, K. R. Srikantha (Trans.). (1991–1992), *Vagbhata, Astanga Hridayam Vols. 1–2*, Varanasi, India: Krishnadas Academy.
3. Sharma, Ram Karan, & Dash, Bhagawan (Eds. & Trans.). (1992–2000), *Charaka Samhita Vols. 1–6*, Varanasi, India: Chaukhamba Sanskrit Series.
4. Sharma, Priyavrat. (1999), *Essentials of Āyurveda: Sodasangahṛdayam*, Delhi: Motilal Banarsidass Publishers.
5. Bhishagratna, Kaviraj Kunjalal (Ed. & Trans.). (2002), *Sushruta Samhita Vols. I–II*, Varanasi, India: Chowkhamba Sanskrit Series.
6. Athavale, V. B. (2005), *Basic Principles of Āyurveda*, New Delhi: Chaukhamba Sanskrit Pratishthan.
7. Acharya, Srinivas. (2006), *Panchakarma Illustrated*, Delhi: Chaukhamba Sanskrit Pratishtana.
8. Godagama, Shantha. (2004), *The Handbook of Āyurveda*, North Atlantic Books.
9. Tripathi, Ravi Datta. (2011), *Vāgbhaṭa's Aṣṭāṅg-saṅgraha*, Delhi: Chowkhamba Sanskrit Pratishthanam.
10. Valiathan, M. S. (2013), *An Introduction to Āyurveda*, Universities Press (India) Private Limited.

**Credits - 4**
**Hours - 60**

## MD (S) 12: Ancient Indian Polity

**Course Objectives:**

1. To introduce the fundamental concepts of Indian Political Thought as discussed in Dharma-śāstra literature.
2. To present political science as an organized discipline in ancient Indian knowledge systems.
3. To acquaint students with political ideas and institutions described in Vedic Saṁhitās, Mahābhārata, Purāṇas, Kauṭilya's Arthaśāstra and Nītiśāstra texts.
4. To help students understand the theoretical and practical aspects of statecraft and governance in ancient India.
5. To encourage the study of ancient Sanskrit texts as sources of political and ethical thought.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the key concepts of Indian political thought as found in ancient Sanskrit literature.
2. Recognize the political philosophies presented in texts like the Vedas, Mahābhārata, Purāṇas and Arthaśāstra.
3. Identify and explain various ancient Indian political institutions and their roles.
4. Develop a deeper appreciation of the ethical and political awareness embedded in classical Indian texts.
5. Foster political consciousness rooted in traditional Indian philosophical perspectives.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (S) 12 | Ancient Indian Polity | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Basic Features of Ancient Indian Political Thought. Credit 1**

- Name, Scope and Sources of Ancient Indian Political Thought.
- Various Names of Indian Polity.
  - Danḍanīti.
  - Arthaśāstra.
  - Dharmaśāstra.
  - Rājśāstra.
  - Nītiśāstra.
- Sources of Ancient Indian Political Thought.
  - Vedic Literature.
  - Purāṇa.
  - Rāmāyaṇa.
  - Mahābhārata.

    - Dharmaśāstra.
    - Nītiśāstra.
    - Kauṭilya's Arthaśāstra.
    - Rājaśāsana (Inscriptions)
- Prominent Indian Political Thinkers.
    - Manu.
    - Śukrācārya.
    - Kauṭilya.
    - Kāmandaka.
    - Somadeva Suri.

**Unit II Ancient Indian Political Thought: Origin and Development. Credit 1**

- Indian Political Thought from Vedic Period to Buddhist Period.
    - Election of King by the People (Vedic Period)
        - Ṛgveda 10.173; 10.174
        - Atharvaveda 3.4.2; 6.87.1–2
- Parliamentary Institutions (Vedic Period)
    - Sabhā.
    - Samiti.
    - Vidatha.
    - Source: Ṛgveda 10.85.26
- Democratic Practices (Buddhist Period)
    - Sources:
        - *Dīgha Nikāya.*
        - *Mahāparinibbāṇa Sutta.*
        - *Aṅguttara Nikāya* 1.213; 4.252, 256

**Unit III Credit 1**

- Nature, Types and Theories of the State.
    - Nature of the State.
        - Arthaśāstra 6.1
        - Manusmṛti 9.294
        - With reference to Saptāṅga-Theory (Brief description)
    - Types of State (Aitareya Brāhmaṇa)
        - Rājya.
        - Svarājya.
        - Bhojya.
        - Vairājya.
        - Mahārājya.
        - Sāmarājya.
        - Source: Aitareya Brāhmaṇa 8.3.13–14; 8.4.15–16
    - Kauṭilya's Concept of Welfare State.
        - Source: Arthaśāstra 1.13
    - Essential Qualities of King.
        - Source: Arthaśāstra 6.1.16–18
    - Duties of King and State (Rājadharma)

    - Mahābhārata (Śāntiparva) 120.1–15
    - Manusmṛti 7.1–15
    - Śukranīti 1.1–15
  - Constituent Elements of Jain Political Thought.
    - Source: Somadeva's Nītivākyāmṛta 9.1.18; 19.1.10

**Unit IV Cardinal Theories and Ancient Indian Political Thinkers. Credit 1**

- Cardinal Theories of Indian Political Science.
  - Saptāṅga Theory of State.
    - Elements: Svāmī (King), Amātya (Minister), Janapada (Territory), Pura (Fort/Capital), Kośa (Treasury), Daṇḍa (Army), Mitra (Ally)
    - Sources:
    - Arthaśāstra 6.1
    - Mahābhārata (Śāntiparva) 56.5
    - Śukranīti 1.61–62
  - Maṇḍala Theory of Inter-State Relations.
    - (Details implied from syllabus)
  - Sadguṇya Policy of War and Peace Diplomacy.
    - (Six strategies of diplomacy)
  - Caturvidha Upāya (Four Means of Statecraft)
    - Śāma (conciliation)
    - Dāma (gifts)
    - Daṇḍa (punishment/force)
    - Bheda (division/dissension)
  - Three Types of State Power (Śakti)
    - Prabhu Śakti (Power of sovereignty/authority)
    - Mantra Śakti (Power of counsel/intelligence)
    - Utsāha Śakti (Power of effort/energy)

**Essential/Recommended Readings/Texts:**


1. Wilson, H. H. (Trans.). (1946). *Ṛgveda Saṁhitā* (6 Vols). Bangalore: Bangalore Printing & Publishing Co.
2. Shastri, H. P. (1952–1959). *Mahabharata* (7 Vols). London: Royal Asiatic Society.
3. Shastri, H. P. (Trans.). (1952–1959). *Ramayana of Valmiki* (3 Vols). London: Royal Asiatic Society.
4. Belvalkar, S. K. (1954). *Mahabharata: Santi Parvam*. Poona: Bhandarkar Oriental Research Institute.
5. Gharpure, J. R. (1956). *Teaching of Dharmashastra*. Lucknow: Lucknow University.
6. Ghosal, U. N. (1959). *A History of Indian Political Ideas*. Bombay: Oxford University Press.
7. Law, N. S. (1960). *Aspects of Ancient Indian Polity*. Calcutta: Sanskrit College.
8. Kangale, R. P. (Ed.). (1965). *Arthashastra of Kautilya*. Delhi: Motilal Banarasidas.
9. Jayaswal, K. P. (1967). *Hindu Polity*. Bangalore: Bangalore Press.

10. Griffith, R. T. H. (Trans.). (1968). *Atharvaveda Samhita* (2 Vols, originally published 1896–97). Delhi: Motilal Banarasidas.
11. Ghosal, U. N. (2001). *State and Government in Ancient India*. Delhi: Motilal Banarasidas.
12. Olivelle, P. (Ed. & Trans.). (2006). *Manu's Code of Law: A critical edition and translation of the Manava-Dharmashastra*. New Delhi: Oxford University Press.
13. Bhandarkar, D. R. (n.d.). *Some Aspects of Ancient Indian Hindu Polity*. Varanasi: Banaras Hindu University.
14. Maheshwari, S. R. (n.d.). *Local Government in India*. New Delhi: Orient Longman.


**Additional Readings:**


1. Sinha, K. N. (1938). *Sovereignty in Ancient Indian Polity*. London: Longmans.
2. Verma, V. P. (1954). *Studies in Hindu Political Thought and its Metaphysical Foundations*. Delhi: Motilal Banarasidas.
3. Saletore, B. A. (1963). *Ancient Indian Political Thought and Institutions*. Bombay: University of Bombay.
4. Prasad, B. (1968). *Theory of Government in Ancient India*. Allahabad: Central Book Depot.
5. Sharma, R. S. (1996). *Aspects of Political Ideas and Institutions in Ancient India*. Delhi: Motilal Banarasidas.

**Credits - 4**
**Hours - 60**

## MD (S) 13: Ancient Indian Medicinal Sciences

**Course Objectives:**

1. To understand the foundational principles, concepts and historical development of Ayurveda, including its philosophical underpinnings.
2. To explore key Ayurvedic texts such as the *Charaka Samhita* and *Sushruta Samhita* and their contributions to medical science.
3. To develop knowledge of Ayurvedic diagnosis techniques, treatment modalities and practical applications.
4. To gain insight into the use of herbal medicine, dietary guidelines and lifestyle recommendations within Ayurveda.
5. To assess the contemporary relevance of Ayurveda in modern healthcare systems and its integration with current practices.

**Learning outcomes:**

After completion of the course, the students will:

1. Understand the historical development and cultural context of Ayurveda and its foundational principles.
2. Identify key Ayurvedic concepts like the five elements, three doshas and individual constitution (Prakriti).
3. Analyze the Ayurvedic approach to health, disease and the role of Agni and Ama in maintaining balance.
4. Apply Ayurvedic diagnostic techniques, including pulse and tongue examination and assess body constitution.
5. Evaluate Ayurveda's role in promoting holistic well-being, preventive healthcare and its philosophical concepts.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (S) 13 | Ancient Indian Medicinal Sciences | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction.** **Credit 1**

- Historical development and cultural context.
- Overview of Ayurveda and its branches.

**Unit II Ayurvedic Philosophy and Principles.** **Credit 1**

- Five elements (Pancha Mahabhutas)
- Three doshas (Vata, Pitta, Kapha)
- Concept of Prakriti (individual constitution)

**Unit III Ayurvedic Diagnosis Techniques.** **Credit 1**

- Nadi Pariksha (pulse diagnosis)

- Jihva Pariksha (tongue examination)
- Examination of body constitution.
- Samprapti (pathogenesis)
- Role of Agni (digestive fire) and Ama (toxicity)

**Unit IV Ayurvedic Treatment Modalities.** **Credit 1**

- Diet and nutrition in Ayurveda.
- Lifestyle recommendations.
- Yoga and meditation practices.

**Essential/Recommended Readings/Texts:**


1. (1979). *The Science of Ayurveda*. Adyar: The Theosophical Publishing House.
2. (1984). *Ayurveda: The Science of Self-Healing*. Twin Lakes: Lotus Press.
3. (1998). *The Complete Illustrated Guide to Ayurveda*. New York: Sterling Publishing Co., Inc.
4. (2000). *Yoga and Ayurveda: Self-Healing and Self-Realization*. Twin Lakes: Lotus Press.
5. (2002). *Principles of Ayurveda*. Albuquerque: The Ayurvedic Press.
6. (2003). *Charaka Samhita*. Varanasi: Chaukhambha Orientalia.
7. (2004). *Ayurvedic Healing: A Comprehensive Guide*. Albuquerque: The Ayurvedic Press.
8. (2006). *Ayurvedic Medicine: The Principles of Traditional Practice*. Edinburgh: Elsevier.
9. (2008). *Ashtanga Hridayam*. Varanasi: Chaukhambha Surbharti Prakashan.
10. (2011). *Sushruta Samhita*. Varanasi: Chaukhambha Sanskrit Sansthan.

**Credits - 4**
**Hours - 60**

## MD (S) 14: Fundamentals of Buddhist Philosophy

**Course Objectives:**

1. To understand the basic teachings, practices and history of Buddhism.
2. To learn the key concepts and philosophical ideas in Buddhism, such as the Four Noble Truths, the Noble Eightfold Path and karma.
3. To explore the history and development of Buddhism in different regions, including South Asia, Southeast Asia, East Asia and the West.
4. To analyze the impact of Buddhism on culture, spirituality and society in various regions.
5. To assess the relevance of Buddhism in contemporary global and individual contexts

**Learning outcomes:**

After completion of the course, the students will:

1. Understand the fundamental teachings and practices of Buddhism.
2. Gain an overview of the historical development of Buddhism in different regions of the world.
3. Develop critical thinking skills by analyzing the philosophical and ethical ideas in Buddhism.
4. Enhance the ability to articulate personal views on Buddhism.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (S) 14 | Fundamentals of Buddhist Philosophy | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction to Buddhism.** **Credit 1**

- Overview of the course.
- Basic concepts of Buddhism.
- The development of Theravada Buddhism.
- Historical context and cultural background.
- The role of Buddhism in ancient India.

**Unit II The Life of the Buddha.** **Credit 1**

- The historical Buddha and his teachings.
- The Four Noble Truths and the Noble Eightfold Path Buddhism- General Introduction with emphasis on Four Noble Truths Pratityasamutpaadvaad.

**Unit III Buddhist Philosophy.** **Credit 1**

- The nature of reality- Shunyavada, Kshanabhangvaad.
- The Three Marks of Existence.
- The concept of karma and rebirth.

**Unit IV Buddhist Ethics. Credit 1**

- The Five Precepts.
- The practice of meditation.
- The role of compassion and wisdom in Buddhist ethics.
- The role of Buddhism in social justice movements and Environmentalism.

**Essential/Recommended Readings/Texts:**

1. Shastri, Kuppuswami. (1951). *A Primer of Indian Logic*.
2. Hiriyanna, M. (1956). *Outline of Indian Philosophy*. London.
3. Pandey, Ram Chandra. (1966). *Panorama of Indian Philosophy*. Delhi: Motilal Banarsidass (MLBD).
4. Chatterjee, S. C., & Datta, D. M. (1968). *Introduction to Indian Philosophy*. Calcutta: Calcutta University.
5. Raja, Kuhnan. (1974). *Some Fundamental Problems in Indian Philosophy*. Delhi: Motilal Banarsidass (MLBD).
6. Bhartiya, Mahesh. (1975). *Causation in Indian Philosophy*. Ghaziabad.
7. O'Flaherty, Wendy Doniger. (1983). *Karma and Rebirth in Classical Indian Tradition*. Delhi: Motilal Banarsidass (MLBD).
8. Rishi, Uma Shankar (Ed.). (1984). *Sarva-Darshana-Samgraha*. Varanasi: Chowkhamba Vidyabhawan.
9. Radhakrishnan, S. (1990). *Indian Philosophy*. Delhi: Oxford University Press.
10. Bhartiya, Mahesh. (1999). *Bhāratīya Darśana Kī Pramukha Samasyāeṁ*. Ghaziabad.
11. Mishra, Pankaj Kumar. (2019). *Vaiśeṣika evaṃ Bauddhoṃ kī Pramāṇa Mīmāṃsā*. Delhi: Parimal Publication.

**Credits - 4**
**Hours - 60**

## MD (S) 15: Fundamentals of Jain Philosophy

**Course Objectives:**

1. To introduce the historical development and foundational beliefs of Jainism.
2. To explore the core practices, rituals and ethical principles followed in Jain tradition.
3. To examine Jain contributions to Indian philosophy, culture, literature and art.
4. To develop an understanding of the Jain worldview, including concepts like non-violence (Ahimsa), karma and liberation (moksha).
5. To evaluate the relevance and influence of Jainism in contemporary Indian society and global religious thought.

**Learning outcomes:**

After completion of the course, the students will:

1. Understand the historical development and foundational principles of Jainism.
2. Analyze the role of Jainism in shaping Indian society, culture and traditions.
3. Explain key ethical principles and daily practices within the Jain tradition.
4. Interpret major themes in Jain literature and philosophical thought.
5. Reflect critically on the contemporary relevance of Jain beliefs and values.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| MD (S) 15 | Fundamentals of Jain Philosophy | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction to Jainism.** **Credit 1**

- The historical background of Jainism.
- Basic concepts of Jainism: Karma, Dharma and Ahimsa.
- Introduction to Jain scriptures: the Agamas and the commentaries.
- Major Texts and Philosophers of Jain Philosophy.

**Unit II Jain Philosophy.** **Credit 1**

- Jaina Ontology- Dravya, Guna, Paryaya, Concept of seven Dravyas, Astikaaya and Anastikaay.
- Jain philosophy: the three principles (Anekantavada, Syadvada and Nayavada)
- The contributions of Jainism to Indian literature and philosophy.
- Jain beliefs about the nature of the soul and the universe.

**Unit III Jain Ethics.** **Credit 1**

- Jain practices: meditation, fasting, rituals, etc.
- The principle of ahimsa (non-violence) and its implications.
- Jain ethics and the environment.

**Unit IV Jainism and Contemporary Society.** **Credit 1**

- The role of Jainism in Indian society and culture.

- Challenges facing Jainism in the modern world.

**Essential/Recommended Readings/Texts:**


1. Shastri, Kuppuswami. (1951). *A Primer of Indian Logic*.
2. Hiriyanna, M. (1956). *Outline of Indian Philosophy*. London.
3. Pandey, Ram Chandra. (1966). *Panorama of Indian Philosophy*. Delhi: Motilal Banarsidass (MLBD).
4. Chatterjee, S. C., & Datta, D. M. (1968). *Introduction to Indian Philosophy*. Calcutta: Calcutta University.
5. Raja, Kuhnan. (1974). *Some Fundamental Problems in Indian Philosophy*. Delhi: Motilal Banarsidass (MLBD).
6. Bhartiya, Mahesh. (1975). *Causation in Indian Philosophy*. Ghaziabad.
7. O'Flaherty, Wendy Doniger. (1983). *Karma and Rebirth in Classical Indian Tradition*. Delhi: Motilal Banarsidass (MLBD).
8. Rishi, Uma Shankar (Ed.). (1984). *Sarva-Darshana-Samgraha*. Varanasi: Chowkhamba Vidyabhawan.
9. Radhakrishnan, S. (1990). *Indian Philosophy*. Delhi: Oxford University Press.
10. Bhartiya, Mahesh. (1999). *Bhāratīya Darśana Kī Pramukha Samasyāeṁ*. Ghaziabad.
11. Mishra, Pankaj Kumar. (2019). *Vaiśeṣika evaṃ Bauddhoṃ kī Pramāṇa Mīmāṃsā*. Delhi: Parimal Publication.

**Credits - 4**
**Hours - 60**

## MD (S) 16: Ayurveda and Nutrition

**Course Objectives:**

1. To introduce the basic principles of nutrition in Ayurveda.
2. To link the Ayurvedic nutrition with modern dietary practices for health.
3. To analyse basic tenets of traditional diets and health recipes.
4. To understand the contemporary food habits in everyday life.

**Learning outcomes:**

After the completion of the course, the students will:

1. Be aware of the traditional food cultures of India.
2. Evaluate changing food patterns and lifestyle over the years.
3. Understand Indian Knowledge Systems (IKS) and key Vedic principles with respect to Food and Nutrition.
4. Apply basic tenets of traditional diets for health and disease.
5. Prepare selected healthy recipes based on Ayurvedic principles.

**Credit Framework**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (S) 16 | Ayurveda and Nutrition | 03 | 0 | 01 | 04 |

**Details of Course:**

**UNIT I Introduction to Ayurvedic Nutrition.** **Credit 1**

- Ayurveda and Indian food cultures.
- Nutrition and lifestyle transition over the years.
- Regional Food Traditions of India.

**UNIT II Basic principles of Food and Nutrition and Ayurveda.** **Credit 1**

- Understanding the rich sources of nutrients.
- Concept of Doshas & assessment.
- Ayurvedic Principles of food habits and factors determining quality of food (Ahara vidhi visheshaayatana).
- FSSAI regulations on Ayurvedic Aahar.

**UNIT III Ayurvedic Diets.** **Credit 1**

- Principles of Diet: Aharavidhi vidhan, Sattvic, Rajasic and Tamasic foods.
- Incompatible food (Viruddha Ahara), Pathya; Apathya; Viparita Ahaar.
- Lifestyle Management with Dincharya and Ritucharya.
- Application of Ayurvedic diets to stress linked food behaviour.

**UNIT IV Practical component. Credit 1**

- Visit your local market and classify the available food items according to Sattvic, Rajasic and Tamasic foods.
- Conduct a survey of 10-15 households in your locality:
  - to study food behaviour and analyse them in light of Ayurvedic dietary principles of Sattvic, Rajasic andTamasic.
  - to study the food consumption patterns and intake of incompatible food:
    - Viruddha Ahara, Pathya; Apathya; Viparita Ahaar.
  - To know about their adopted lifestyle, Dincharya and Ritucharya.
- Students are required to visit available e-resources of various Universities, Ministry of Ayush Etc. with regard to Ayurveda and Nutrition.
- Students may share their experiences in the form of a Project Report.
- The students may share their experiences in the form of audio-visual presentations of 15-30 minutes.
- Any other Practical/Practice may be suggested as per the requirement.

**Essential/Recommended Readings/Texts:**


1. Rastogi, S. (2010). *Building Bridges Between Ayurveda and Modern Science*. International Journal of Ayurveda Research, 1(1), 41–46.
2. Rastogi, S. (2014). *Ayurvedic Science of Food and Nutrition*. ASIN: BOOHWMV094. Springer.
3. Frawley, D. (2012). *Ayurvedic Healing: A Comprehensive Guide*. India: Lotus Press.
4. FSSAI. (2022). *Ayurveda Aahar Regulations 2022*. Gazette of India, CG-DL-E-07052022-235642. New Delhi: Government of India.
5. Indian Knowledge Systems. Retrieved from https://iksindia.org/


**Additional Readings:**


1. Charaka. (1998). *Charaka Samhita: Sutra Sthana, Maharashitiya Adhyaya* (B. N. Tripathi, Ed.). Varanasi: Chaukhamba Orientalia.
2. Kapoor, K., & Singh, A. K. *Indian Knowledge Systems, Volume 1*. Shimla: Indian Institute of Advanced Study, Published by DK Printworld (P) Ltd, New Delhi.
3. University of Lucknow. Retrieved from https://www.lkouniv.ac.in

**Credits - 4**
**Hours - 60**

## MD (S) 17: Vedic Mathematics - I

**Course Objectives:**

1. Foster the love for mathematics by creating a positive attitude through Vedic and Ancient Indian Mathematics.
2. Help students appreciate ancient Indian Mathematics and its contribution to the world.
3. Enhance conceptual as well as computational proficiency in trigonometric ratios and complex numbers.
4. Understand the conceptual ideas of coordinate geometry as developed and used in Ancient and medieval India.
5. Discuss the rich heritage of mathematical temperament of Ancient India.

**Learning outcomes:**

After the completion of the course, the students will:

1. Improve critical as well as logical thinking.
2. Develop familiarity with the mathematical procedures of geometry.
3. Develop ability to perform calculations in trigonometric ratios with ease.
4. Appreciate the Mathematical advancements of Ancient India.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (S) 17 | Vedic Mathematics - I | 03 | 0 | 01 | 04 |

**Details of Course:**

**Unit I Vedic Maths - High Speed Addition and Subtraction. Credit 1**

- Vedic Maths: History of Vedic Maths and its Features.
- Vedic Maths formulae. Sutras and Upsutras.
- Addition in Vedic Maths: Without carrying, Dot Method.
- Subtraction in Vedic Maths: Nikhilam Navatashcaramam Dashatah (All from 9 last from 10).
- Fraction, Addition and Subtraction.

**Unit II Vedic Maths - Miracle Multiplication and Excellent Division. Credit 1**

- Multiplication in Vedic Maths: Base Method (any two numbers upto three digits).
- Multiplication by Urdhva Tiryak Sutra.
- Miracle multiplication: Any three-digit number by series of 1's and 9's.
- Division by Urdhva Tiryak Sutra (Vinculum method).

**Unit III Vedic Maths - Lightening Squares and Rapid Cubes. Credit 1**

- Squares of any two-digit numbers: Base method.
- Square of numbers ending in 5: Ekadhikena Purvena Sutra.

- Easy square roots: Dwandwa Yoga (duplex) Sutra.
- Square root of 2. Baudhayana Shulbasutra.
- Cubing: Yavadunam Sutra.

**Unit IV Vedic Maths - Enlighten Algebra and Geometry. Credit 1**

- Factoring Quadratic equation: Anurupyena, Adyamadyenantyamanty Sutra.
- Concept of Daudhayana (Pythagoras) Theorem.
- Circling a square: Baudhayana Shulbasutra.
- Concept of pi: Baudhayana Shulbasutra.
- Concept angle (8) 0o, 30o, 45o, 60o and 90o: Baudhayana number.

**Practical component:**

1. The students are expected to demonstrate the application of Vedic Maths: Sutra and Upsutra.
2. Conduct workshops under the supervision of the course teacher to spread awareness on the utility of Vedic Mathematics.
3. Students are required to visit nearby retail shops/local vendors to purchase stationery/vegetables/bread and butter and use tricks of Vedic maths of addition and subtraction to calculate the amount to pay and receive the difference.
4. Students may share their experience with the class teacher in the form of audio-video presentations of 15 minutes.
5. Students may share their experiences in the form of a Project Report.
6. Any other Practical/Practice may be suggested as per the requirement.

**Essential/Recommended Readings/Texts:**

1. Bathia, D. (2011). *Vedic Mathematics Made Easy*. New Delhi: Jaico Publishing.
2. Trithaji, J. S. Ś. B. K. (2015). *Vedic Mathematics: Sixteen Simple Mathematical Formulae from the Vedas*. New Delhi: Motilal Banarsidass.
3. Patil, C. A. (2018). *Learn Vedic Speed Mathematics Systematically*.
4. Thakur, R. K. (2019). *The Essential of Vedic Mathematics*. New Delhi: Rupa Publications.

**Additional Readings:**

1. Bhanumurthy, T. S. *A modern introduction to ancient Indian mathematics*. Wiley Eastern Limited, New Delhi.
2. Chauthaiwale, S. M., & Kollaru, R. *Enjoy Vedic mathematics*. The Art of Living.
3. Unkalkar, V. G. *Magical world of mathematics*. Vandana Publishers, Bangalore.

**Credits - 4**
**Hours - 60**

## MD (S) 18: Vedic Mathematics - II

**Course Objectives:**

1. To foster a love for mathematics by cultivating a positive attitude through the exploration of Vedic and Ancient Indian Mathematics.
2. To appreciate the richness and global significance of Ancient Indian Mathematics.
3. To enhance computational proficiency by applying methods in Linear and Matrix Algebra.
4. To improve geometrical thinking by understanding fundamental principles such as the construction of line segments, angles, triangles and circles as practiced in Ancient India.
5. To develop a deep conceptual understanding of core mathematical concepts.
6. To appreciate the need of conceptual knowledge over rote procedural learning.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Think critically.
2. Find mathematical solution of algebraic expressions.
3. Solve system of linear equations and matrices faster and with ease.
4. Appreciate the Mathematical advancements of Ancient India.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (S) 18 | Vedic Mathematics - II | 03 | 0 | 01 | 04 |

**Details of Course:**

**Unit I Contribution of Indian Mathematicians. Credit 1**

- Varahmihir.
- Brahmagupta.
- Srinivasa Ramanujan.
- Neelkanth Somayya.
- Bharti Krishna Tirtha.

**Unit II Easy Solution of linear equations. Credit 1**

- Introduction of simple equation.
- Solutions of simple equations.
- Solutions of linear equations in two variables.
- Practical application of linear equations in two variables.

**Unit III High Speed Matrix Algebra. Credit 1**

- Introduction and history of Matrices and Determinants.
- Matrices and Determinants of third order.
- Inverse of Matrices.

**Unit IV Vedic Geometry. Credit 1**

- Different forms of straight lines.
- The Triangle.
- The Cyclic Quadrilateral, Squares and the Circle.
- Geometrical constructions (such as Altars)
- Transformation of simple shapes.
- Kalpa Sutras, Srautha Sutras and Sulbha Sutras.

*Note: Some of the theoretical concepts may be dealt with during practice hours.*

**Practical/ Practice Component**

The students are expected to demonstrate the application of Vedic Maths through various Sutras.

1. Conduct workshops under the supervision of the course teacher to spread awareness on the utility of Vedic Mathematics.
2. Students may share their experience with the class teacher in the form of audio-video presentations of 15 minutes.
3. If required, students can share their experiences in the form of a Project Report.
4. Any other Practical/Practice as decided from time to time.

**Essential/Recommended Readings/Texts:**


1. Gardner, R., & Staal, J. F. (Directors). (1976). *Altar of Fire* [Documentary]. The Film Study Center at Harvard University.
2. Bharati Krishna Tirthaji. (1985). *Vedic Mathematics*. New Delhi: Motilal Banarsidass.
3. Singhal, V. (2007). *Vedic Mathematics for All Ages*. New Delhi: Motilal Banarsidass Publishers.
4. Kapoor, S. K. (2007). *Vedic Geometry Course*. Delhi: Lotus Press.
5. Thakur, R. K. (2013). *The Essentials of Vedic Mathematics*. New Delhi: Rupa Publications.
6. Patankar, U. S., & Patankar, S. M. (2018). *Elements of Vedic Mathematics*. TTU Press.
7. Bajaj, R. (n.d.). *Vedic Mathematics: The Problem Solver*. Delhi: Black Rose Publications.


**Additional Readings:**


1. Unkalkar, V. G. (2005). *Magical World of Mathematics*. Bangalore: Vandana Publishers.
2. Kapoor, S. K. (2007). *Learning Vedic Mathematics*. Delhi: Lotus Press Publications.
3. Bhanumurthy, T. S. (2008). *A Modern Introduction to Ancient Indian Mathematics*. New Delhi: Wiley Eastern Limited.
4. Tiwari, P. (2012). *Vedic Mathematics – Modern Research Methods*. Delhi: Campus Books International.
5. Kapoor, S. K. (2012). *Vedic Mathematics: New Horizons Advance Lessons*. Delhi: Lotus Press.
6. Bathia, D. (2021). *Vedic Mathematics Made Easy*. New Delhi: Jaico Publishing.

**Credits - 4**
**Hours - 60**

## MD (S) 19: Vedic Mathematics - III

**Course Objectives:**

1. To foster a love for mathematics by developing a positive attitude through Vedic and Ancient Indian Mathematics.
2. To help students appreciate Ancient Indian Mathematics and its contributions to the world.
3. To enhance both conceptual understanding and computational proficiency in trigonometric ratios and complex numbers.
4. To understand the conceptual foundations of coordinate geometry as developed and applied in Ancient and Medieval India.
5. To explore the rich heritage of mathematical thinking and temperament in Ancient India.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Develop improved critical and logical thinking skills.
2. Gain familiarity with the mathematical procedures of geometry.
3. Acquire the ability to perform calculations involving trigonometric ratios with ease.
4. Appreciate the mathematical advancements of Ancient India.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| MD (S) 19 | Vedic Mathematics - III | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Contribution of Indian Mathematicians -Trigonometry.** **Credit 1**

- Apastamba.
- Aryabhata I, II.
- Bhaskara I, II.
- Lilavati.

**Unit II Trigonometric Ratios.** **Credit 1**

- Introduction of Trigonometric ratios.
- Trigonometric Identities.
- BN of Complementary angles.
- BN of sum and difference (a ± B) of an angle.

**Unit III Real-life Applications of Trigonometry.** **Credit 1**

- Application Trigonometry - Height and Distance.

- Inverse Trigonometric Function.

**Unit IV Vedic Geometry. Credit 1**

1. Angle between two lines.
2. Perpendicular distance from point to line.
3. Baudhayan Geometry.
4. Jyothisha Shastram; Introduction of Astronomy, Astrology & Time Computation.
5. Shilpa Shastram; Introduction of temple, architecture and constructions.

**Practical/ Practice Component**

The students are expected to demonstrate the application of Vedic Maths: Sutra and Upsutra.

1. Conduct workshops under the supervision of the course teacher to spread awareness on the utility of Vedic Mathematics.
2. Students may share their experience with the class teacher in the form of audio-video presentations of 15 minutes.
3. Students may share their experiences in the form of a Project Report.

**Essential/Recommended readings/Texts:**

1. Gardner, R., & Staal, J. F. (Directors). (1976). *Altar of Fire* [Documentary film]. Cambridge, MA: The Film Study Center at Harvard University.
2. Trithaji, S. B. K. (1985). *Vedic Mathematics*. New Delhi: Motilal Banarsidass.
3. Singhal, V. (2007). *Vedic Mathematics for All Ages*. Delhi: Motilal Banarsidass Publishers.
4. Kapoor, S. K. (2007). *Vedic Geometry Course*. New Delhi: Lotus Press.
5. Patankar, U. S., & Patankar, S. M. (2018). *Elements of Vedic Mathematics*. TTU Press.
6. Gupta, A. *The Power of Vedic Mathematics with Trigonometry*. Mumbai: Jaico Publishing House.
7. Bajaj, R. *Vedic Mathematics: The Problem Solver*. Black Rose Publications.
8. Kolachana, A., Mahesh, K., & Ramasubramanian, K. *Studies in Indian Mathematics and Astronomy*. Singapore: Springer.

**Additional Readings:**

1. Williams, K. R. (2003). *Astronomical Applications of Vedic Mathematics*. Delhi: Motilal Banarsidass Publishers.
2. Bhanumurthy, T. S. (2008). *A Modern Introduction to Ancient Indian Mathematics*. New Delhi: Wiley Eastern Limited.
3. Tiwari, P. (2012). *Vedic Mathematics: Modern Research Methods*. New Delhi: Campus Books International.
4. Thakur, R. K. (2013). *Essentials of Vedic Mathematics*. New Delhi: Rupa Publications.
5. Bhaskaracharya. (n.d.). *A Treatise on Astronomy*. New Delhi: Cosmo Publication.

# POOL OF SKILL ENHANCEMENT COURSES

**Credits - 2**
**Hours - 30**

## SEC 1: Yoga for well being

**Course Objectives:**

1. To introduce the origin, philosophy and practical dimensions of Yoga through authentic Indian scriptures.
2. To enable experiential learning of Asanas, Pranayama and Dhyana for holistic health.
3. To explore the relationship between Yoga and mental, physical, social and spiritual well-being.
4. To train students in yogic discipline (Yama-Niyama) and promote ethical life values.
5. To enable students to adopt a yogic lifestyle for holistic health.

**Learning Outcomes:**

After completion of the course, the students will:

1. Describe the origin, meaning and philosophy of Yoga.
2. Explain the eight limbs of Yoga (Ashtanga Yoga) and their relevance to modern life.
3. Demonstrate proficiency in selected Yoga Asanas, Pranayama techniques and Dhyana.
4. Explain the relevance of Yoga in managing lifestyle disorders.
5. Integrate yogic practices into daily routines for physical and mental well-being.
6. Analyze the role of Yoga in ethical living and spiritual development.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 1 | Yoga for well being | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Foundations of Yoga and Indian Philosophy**

- Definitions: Yoga, its etymology and scope (*Bhagavad Gita*, *Yoga Sutras*, *Hatha Yoga Pradipika*).
- Definitions of Yoga from Patanjali, Bhagavad Gita, Yajnavalkya.
- Purpose and goals of Yoga.
- Yoga as a tool for self-realization and holistic health.
- Schools of Yoga: Jnana, Bhakti, Karma and Raja Yoga.
- Gita-based Yoga for character building and karma alignment.
- Health as per Ayurveda and Yoga.

**Unit II Patanjali Yoga Darshana.**

- Overview of the *Yoga Sūtras* of Patanjali.
- *Ashtanga Yoga* – Eightfold Path:
  1. Yama (Ethical restraints)
  2. Niyama (Observances)
  3. Asana (Postures)
  4. Pranayama (Breath control)
  5. Pratyahara (Withdrawal of senses)

6. Dharana (Concentration)
7. Dhyana (Meditation)
8. Samadhi (Absorption)

- Yamas and Niyamas as tools for personal transformation.

**Unit III Practical Yoga – Asanas and Breathing Techniques.**

- Practice and benefits of:
  - Standing, Sitting, Supine and Prone postures.
  - Surya Namaskar.
  - Breathing: Nadi Shodhana, Bhramari, Bhastrika, Sheetali.
  - Bandhas and Mudras (introductory level)

**Unit IV Yoga for Stress Management and Health.**

- Yogic psychology: Chitta, Vrittis and control of mind.
- Role of Yoga in managing lifestyle disorders (e.g. diabetes, hypertension, anxiety)
- Mindfulness, meditative practices and daily routine (Dinacharya, Sadvritta)

**Unit V Applied Yoga for Health and Wellness.**

- Role of Yoga in disease prevention and therapy.
- Importance of Diet and lifestyle in Yogic therapy.

Basic Asanas: Tadasana, Trikonasana, Vrikshasana, Bhujangasana, Gomukhasana, Veerasana.

**Teaching Methodology.**

- Lectures with traditional and modern perspectives.
- Daily practice sessions of Yoga (Asanas & Pranayama)

**Essential/Recommended Readings/Texts:**

1. Patanjali. *Yoga Sutras* (Commentary by Swami Vivekananda or Maharshi Vyasa).
2. Swatmarama. *Hatha Yoga Pradipika*.
3. Vyasa. *Patanjali Yoga Sutras* (with Vyasa Bhashya).
4. Gita Press. *Bhagavad Gita* (Chapters 2, 3, 5, 6 and 12). Gorakhpur: Gita Press.
5. *Yoga in Daily Life*. New Delhi: Neelkamal Publications.

**Additional Sources:**

1. Sivananda, S. *Essence of Yoga*.
2. Iyengar, B. K. S. *Light on Yoga*.
3. Ministry of AYUSH. *Common Yoga Protocol Manual*. New Delhi: Ministry of AYUSH.
4. IKS Division, Ministry of Education. *Yoga in Indian Knowledge Systems*. New Delhi: IKS Division, MoE.

श्रेयोऽङ्का: - 2
होरा: - 30

## Sanskrit Version

### SEC 1: स्वास्थ्यसंरक्षणाय योग:

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. योगस्य उत्पत्ति-दर्शन-व्यावहारिक-आयामानां च परिचय:।
2. समग्रस्वास्थ्यार्थम् आसन-प्राणायाम-ध्यानादिषु क्षमतासम्पादनम्।
3. योगस्य मानसिक-शारीरिक-सामाजिक-आध्यात्मिक-स्वास्थ्यरक्षणैस्सह सम्बन्धस्य अन्वेषणम्।
4. योगानुशासनमाध्यमेन (यम-नियमौ) छात्राणां नैतिकजीवनमूल्यसंवर्धनम्।
5. समग्रस्वास्थ्यस्य कृते छात्रेभ्य: योगजीवनशैल्या: आत्मसात्करणे क्षमताप्रदानम्।

**अधिगमस्य परिणामा: (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्रा: :-

1. योगस्य उत्पत्तिम् अर्थं च वर्णयिष्यन्ति।
2. योगस्य (अष्टाङ्गयोग:) अष्टाङ्गानां व्याख्याम् आधुनिकजीवने तेषां प्रासंगिकतां च वदिष्यन्ति।
3. चितयोगासन-प्राणायामप्रविधि-ध्यानादिषु प्रावीण्यं प्रदर्शयिष्यन्ति।
4. जीवनशैलीविकाराणां प्रबन्धने योगस्य प्रासंगिकतां व्याख्यास्यन्ति।
5. शारीरिक-मानसिक-स्वास्थ्यसंरक्षणाय योग-अभ्यासानां दैनन्दिन-दिनचर्यासु समावेशं करिष्यन्ति ।
6. नैतिकजीवन-आध्यात्मिकविकासयो: योगस्य भूमिकाया: विश्लेषणं करिष्यन्ति ।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्क: (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् ((Credit Distribution of the Course)) | | | श्रेयोऽङ्का: (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यास: (Practical/ Practice) | |
| SEC 1 | स्वास्थ्यसंरक्षणाय योग: | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्विति: १. योगस्य भारतीयदर्शनस्य च मूलाधारा: ।**

- परिभाषा: - योग:, योगस्य व्युत्पत्ति:, व्याप्तिश्च (भगवद्गीता योगसूत्राणि हठयोगप्रदीपिका च)
- पतञ्जलि-भगवद्गीता-याज्ञवल्क्यादिभि: उल्लिखिता: योगस्य परिभाषा:।
- योगस्य प्रयोजनं लक्ष्यञ्च ।
- आत्मसाक्षात्कारस्य समग्रस्वास्थ्यस्य च साधनत्त्वेन योग: ।
- योगस्य प्रकारा: - ज्ञानयोग: भक्तियोग: कर्मयोग: राजयोगश्च
- चरित्रनिर्माणे कर्मण: प्रसङ्गे च गीता-आधारितयोग:।

- आयुर्वेदयोगयोः अनुगुणं स्वास्थ्यम्।

**अन्वितिः २. पातञ्जलयोगदर्शनम्।**

- पातञ्जलयोगसूत्राणां विहङ्गावलोकनम्।
    1. अष्टाङ्गयोगः।
    2. यमः (Ethical restraints)
    3. नियमः (Observances)
    4. आसनम् (Postures)
    5. प्राणायामः (Breath control)
    6. प्रत्याहारः (Withdrawal of senses)
    7. धारणा (Concentration)
    8. ध्यानम् (Meditation)
- समाधिः (Absorption)
- व्यक्तिगतपरिवर्तनस्य साधनत्वेन यमनियमाश्च।

**अन्वितिः ३. योगासनानां प्राणायामस्य च अभ्यासः।**

- **उत्तानासनस्थितिः** – ताडासनम् (Palm Tree Pose) वृक्षासनम् (Tree Pose) उत्कटासनम् (Chair Pose)
- **आसनस्थितिः** – सुखासनम् (Easy Pose) पद्मासनम् (Lotus Pose) वज्रासनम् (Thunderbolt Pose)
- **शवासनस्थितिः** – शवासनम् (Corpse Pose) सुप्तबद्धकोणासनम् (Reclining Bound Angle Pose) सेतुबन्धासनम् (Bridge Pose) पवनमुक्तासनम् (Wind-Relieving Pose)
- **मकरासनस्थितिः** - मकरासनम् (Crocodile Pose) भुजङ्गासनम् (Cobra Pose) शलभासनम् (Locust Pose) धनुरासनम् (Bow Pose)
- सूर्यनमस्कारः।
- प्राणायामाः : नाडिशोधनं भ्रामरी भस्त्रिका शीतली च।
- बन्धाः मुद्राश्च (परिचयस्तरः)

**अन्वितिः ४. तन्यताप्रबन्धनस्य स्वास्थ्यस्य कृते च योगः ।**

- योगमनोविज्ञानम् : चित्त-वृत्ति-मनसां नियन्त्रणम्।
- जीवनशैलीविकाराणाम् (उदा. मधुमेहः, उच्चरक्तचापः, चिन्ता) प्रबन्धने योगस्य भूमिका।

**अन्वितिः ५. स्वास्थ्यकल्याणाभ्याम् (Health and Wellbeing) अनुप्रयुक्तयोगः ।**

- रोगनिवारणे चिकित्सायां च योगस्य भूमिका ।
- योगचिकित्सायाम् आहारस्य जीवनशैल्याः च महत्त्वम् ।

- सामान्य-आसनानि : वृक्षासनं भुजंगासनं गोमुखासनं वीरासनञ्च ।

**निर्धारिता: ग्रन्था: (Essential/Recommended Readings/Texts)**


1. Patanjali. *Yoga Sutras* (Commentary by Swami Vivekananda or Maharshi Vyasa).
2. Swatmarama. *Hatha Yoga Pradipika*.
3. Vyasa. *Patanjali Yoga Sutras* (with Vyasa Bhashya).
4. Gita Press. *Bhagavad Gita* (Chapters 2, 3, 5, 6 and 12). Gorakhpur: Gita Press.
5. *Yoga in Daily Life*. New Delhi: Neelkamal Publications.


**सहायका: ग्रन्था: (Additional Readings)**


1. Sivananda, S. *Essence of Yoga*.
2. Iyengar, B. K. S. *Light on Yoga*.
3. Ministry of AYUSH. *Common Yoga Protocol Manual*. New Delhi: Ministry of AYUSH.
4. IKS Division, Ministry of Education. *Yoga in Indian Knowledge Systems*. New Delhi: IKS Division, MoE.

**Credits - 2**
**Hours - 30**

## SEC 2: Basic Skills for Research Paper and Dissertation

**Course Objectives:**

1. To introduce students to the fundamentals of writing research dissertations and academic papers.
2. To help students acquire essential skills for effective and scholarly research writing.
3. To ensure a clear understanding of academic standards, structure and formatting required in research.
4. To familiarize students with the techniques and methodologies applicable to academic research and writing.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Learn the basics of writing research dissertations or papers.
2. Acquire the necessary skills required for effective research writing.
3. Gain a clear understanding of the standards to be followed in academic research.
4. Become familiar with the techniques to be used in their research writings.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 2 | Basic Skills for Research Paper and Dissertation | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Theoretical concept of Research.**

- Introduction, Objectives and Types of Research.
- Outline of Research Work.
- Topic Selection and Writing Methods.
- Material Collection: Primary and Secondary.
- E-Recourses and Research Tools.

**Unit II Dissertation/Paper Editing Tools.**

- Typing tools for Unicode Devanagari.
- Editing Tools: Microsoft Word and Google Docs.

**Unit III Basics of Research Paper Writing.**

- Topic Selection.
- Review of Literature.
- Drafting the body.
- Revision/Editing.
- Major Components of Research Papers.
    - Abstract
    - Keywords
    - Background and Introduction

- Review of Literatures
    - Objective
    - Material (data) and methodology
    - result and discussions
    - conclusions
    - finding
    - future direction of research
    - acknowledgement, references.

**Unit IV Dissertation Writing Skill.**

- Overview of the dissertation.
- Major steps: Proposal, Dissertation Writing, Editing/Review.
- Presentation and Submission.
- Essential Elements of Research Proposal: -
    - Research topic selection.
    - A brief description of the proposed thesis.
    - Preliminary outline of the proposed research.
    - Survey.
    - Reference list.
- Structure of Dissertation.
    - Title Page.
    - Acknowledgement.
    - Abstract.
    - Table of Contents.
    - List of figures.
    - List of Tables.
    - List of Appendixes.
    - Dissertation Chapters.
    - References Lists.

**Essential/Recommended Readings/Texts:**


1. Teacher's notes, ppt and handout.
2. http://www.makeuseof.com/tag/5-powerpoint-tips-improve-presentation-skills-overnight/
3. https://www.slideshare.net/subagini/effective-presentation-skills-28512891
4. http://www.free-power-point-templates.com/articles/18-tips-to-improve-presentation-skills/
5. Yelikar, K. S. (2009). *Essentials of Research Methodology & Dissertation Writing*. New Delhi: Jaypee Brothers Medical Publishers.

**Credits - 2**
**Hours - 30**

## SEC 3: Introduction to AI, AR and VR (Sanskrit Perspective)

**Course Objectives:**

1. To explore philosophical and cognitive foundations of AI through Sanskrit texts.
2. To examine parallels between Sanskrit grammar (Vyākaraṇa), logic (Nyāya) and machine intelligence.
3. To introduce students to Sanskrit-based ontologies and semantic networks used in AR andVR environments.
4. To inspire culturally rooted innovation in emerging technologies.

**Learning Outcomes:**

After completion of the course, the students will:

1. Describe foundational concepts of intelligence in Sanskrit literature (e.g., buddhi, chitta, manas).
2. Analyze Paninian grammar structures as models for computational linguistics.
3. Examine Indian epistemology (pramāṇa) for AI decision-making frameworks.
4. Develop basic Sanskrit-based ontologies for AR and VR applications.
5. Critically assess ethical implications of AI, AR and VR using Sanskrit dharma frameworks.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| **SEC 3** | **Introduction to AI, AR and VR (Sanskrit Perspective)** | **02** | **0** | **0** | **02** |

**Details of Course:**

**Unit I Cognitive and Philosophical Roots of Intelligence in Sanskrit Texts.**

- Concepts: Buddhi, Manas, Ahamkāra, Chitta (from Sāṅkhya and Vedānta)
- Definitions and classifications of consciousness and intelligence.
- Nyāya-Vaiśeṣika models of perception and inference.
- Artificial vs Natural Intelligence – Sanskrit perspective.

**Key Sources**:

- *Sāṅkhya Kārikā*, *Yoga Sūtras*, *Nyāya Sūtras, Vaiśeṣika Sūtras.*

**Unit II Sanskrit Grammar and Linguistic Intelligence (Panini's Vyākaraṇa)**

- Paninian grammar as a rule-based generative system.
- Role of meta-rules (Paribhāṣā-s) and formal production (Ashtādhyāyī + Siddhānta Kaumudī).
- Algorithms in Śabdānuśāsana: parallels with machine learning and NLP.
- Sanskrit as a formal language for AI and computational modeling.

**Key Sources**:

- *Aṣṭādhyāyī* – Selected sūtras.

- *Mahābhāṣya* (Patañjali)

**Unit III Knowledge Representation and Logic Systems in Indian Thought.**

- Five-fold inference (pañcāvayava, Vākya) and tarka in Nyāya.
- Ontological categories: padārtha (द्रव्यगुणकर्मादयः - substance, quality, action, etc.)
- Semantic networks in Mimāṃsā and Vedānta.
- Representation of knowledge for expert systems.

**Key Sources**:

- *Nyāya Sūtras*, *Tarka Saṅgraha.*
- *Brahmasūtra Bhāṣya* – knowledge and self-awareness models.

**Unit IV Augmented and Virtual Realities in Indic Epistemology.**

- Maya, Pratibhāsa and virtuality in Vedānta and Yoga.
- Imagination (vikalpa) and simulation (pratīti) in Sanskrit philosophy.
- Applications in immersive storytelling: Mahābhārata & Rāmāyaṇa as experiential AR and VR models.

**Unit V Sanskrit Ontologies and Computational Applications.**

- Building Sanskrit-based ontologies using padārtha (द्रव्यगुणकर्मादयः - substance, quality, action, etc.) taxonomy.
- Use of Sanskrit in structured data: XML, RDF and OWL.
- Sanskrit databases for cultural AR and VR: temples, rituals, literature.

**Tools**:

- Jñānam ontology Project (IGNCA), Sanskrit Heritage Platform, IKS ontologies (IIT-KGP)

**Teaching Methods:**

- Interactive lectures with Sanskrit verse analysis.
- Project-based learning (Sanskrit-based AI ontology design or VR storytelling).
- Digital simulations (using AR and VR for Sanskrit content visualization).
- Guest lectures from Sanskrit + Tech experts.

**Tutorial / Project Suggestions:**

- Design a Sanskrit-based chatbot using Paninian rules.
- Create an AR prototype of a Vedic yajña setup with Sanskrit annotations.
- Build a knowledge graph of Nyāya padārthas.
- VR storytelling module of a scene from the Rāmāyaṇa or Upaniṣads.

**Essential/Recommended Readings/Texts:**

1. *Pāṇini's Aṣṭādhyāyī* (with Siddhānta Kaumudī)
2. *Yoga Sūtras* of Patañjali.
3. *Nyāya Sūtras* and *Tarka Sangraha.*
4. *Bhagavad Gītā* and *Upaniṣads.*

5. *Sāṅkhya Kārikā.*
6. *Mahābhāṣya* (Patañjali)

**Additional Readings:**

1. Subhash Kak – *Artificial Intelligence and the Sanskrit Tradition.*
2. Rajiv Malhotra – *Artificial Intelligence and the Future of Power.*
3. Gopal Krishna – *Nyāya Logic and AI Systems.*
4. Sanskrit Heritage Site: https://sanskrit.inria.fr/
5. Jñānam Ontology Project (IGNCA).

Credits - 2
Hours - 30

## SEC 4: Introduction to Artificial Intelligence

**Course Objectives:**

1. To introduce the fundamental concepts and techniques of Artificial Intelligence (AI).
2. To provide practical knowledge of problem-solving, knowledge representation and machine learning.
3. To equip students with the ability to apply AI methods in real-world scenarios.
4. To promote ethical thinking and societal implications of AI.

**Learning Outcome**

After completion of the course, the students will:

1. Explain the key concepts, applications and history of AI.
2. Apply basic AI techniques such as search algorithms and rule-based systems.
3. Demonstrate understanding of knowledge representation, logic and inference.
4. Build and evaluate basic machine learning models.
5. Analyze the ethical and social implications of AI.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 4 | Introduction to AI | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Augmented Reality.**

- Definition and history of AR.
- Comparison with Virtual Reality (VR) and Mixed Reality (MR).
- Types of AR: Marker-based, markerless, projection-based and superimposition-based AR.
- Major milestones in AR development.

- ***Reading*:**
  - Ronald Azuma's "A Survey of Augmented Reality"
  - Excerpts from *Understanding Augmented Reality* by Alan B. Craig

**Unit II AR System Components and Technologies.**

- Hardware: AR headsets, smart glasses, mobile phones.
- Sensors and input devices: GPS, accelerometer, gyroscope.
- Display technologies: Optical see-through vs video see-through.
- Tracking and registration techniques: SLAM, image-based tracking.

- ***Tools Introduced*:**
  - ARKit (Apple), ARCore (Google), Vuforia, Unity3D basics.

**Unit III AR Design and Interaction.**

- UI/UX design for AR environments.
- 2D/3D content placement and animation.

- Human-computer interaction in AR.
- Spatial design and storytelling in AR apps.

- ***Project Demo*:**
  - Build a simple marker-based AR app with Unity and Vuforia.

**Unit IV Applications of AR.**

- Education and Training: Immersive learning modules.
- Retail and Marketing: Virtual try-on, product visualization.
- Tourism and Heritage: Site reconstructions and guided tours.
- Healthcare and Surgery: Overlay-based diagnosis and visualization.
- Industrial and Military: Maintenance and field training tools.

- ***Case Studies*:**
  - IKEA AR app, Google Lens, Snapchat filters, AR in Indian heritage sites.

**Unit V Ethical and Social Dimensions of AR.**

- Data privacy and surveillance concerns.
- Impact on cognition, behavior and social interaction.
- Inclusivity and accessibility challenges.
- Cultural sensitivities and digital overlays in sacred spaces.

- ***Discussion Topics*:**
  - AR and the real–virtual boundary.
  - Guidelines from UNESCO and IEEE on immersive technologies.
- **Teaching Methodology:**
  - Instructor-led lectures and concept demonstrations.
  - Video-based tutorials and lab walkthroughs.
  - AR app development mini projects.
  - Critical review of AR case studies across domains.
- **Suggested Tools & Platforms:**
  - Unity 3D with Vuforia.
  - Web AR platforms like 8$^{th}$ Wall or Zap Works.
  - AR Core and ARKit SDKs.
  - Blender or Tinkercad for 3D content.

**Essential/Recommended Readings/Texts:**

1. Alan B. Craig – *Understanding Augmented Reality: Concepts and Applications.*
2. Dieter Schmalstieg & Tobias Hollerer – *Augmented Reality: Principles and Practice.*

**Online Resources:**

1. Unity Learn (AR Development Track).
2. Coursera AR/VR Specialization.
3. Google Developers ARCore Guide.
4. Apple Developer Documentation (ARKit).

Credits - 2
Hours - 30

## SEC 5: Introduction to Augmented Reality (AR)

**Course Objectives:**

1. To introduce the fundamentals and applications of Augmented Reality (AR).
2. To explore the technological, design and experiential aspects of AR systems.
3. To develop the ability to create basic AR experiences using modern tools.
4. To evaluate ethical and societal implications of AR technologies.

**Learning Outcomes:**

After completion of the course, the students will:

1. Describe the principles, components and evolution of AR systems.
2. Distinguish AR from related technologies like VR and MR.
3. Design and build basic AR applications using development platforms.
4. Analyze real-world applications of AR in fields like education, retail and tourism.
5. Assess ethical, cultural and accessibility issues in AR deployment.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 5 | Introduction to Augmented Reality (AR) | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Augmented Reality.**

- Definition and history of AR.
- Comparison with Virtual Reality (VR) and Mixed Reality (MR)
- Types of AR: Marker-based, marker-less, projection-based and superimposition-based AR.
- Major milestones in AR development.

- ***Reading*:**
  - Ronald Azuma's "A Survey of Augmented Reality"
  - Excerpts from *Understanding Augmented Reality* by Alan B. Craig.

**Unit II AR System Components and Technologies.**

- Hardware: AR headsets, smart glasses, mobile phones.
- Sensors and input devices: GPS, accelerometer, gyroscope.
- Display technologies: Optical see-through vs video see-through.
- Tracking and registration techniques: SLAM, image-based tracking.

***Tools Introduced*:**

- ARKit (Apple), ARCore (Google), Vuforia, Unity3D basics.

**Unit III AR Design and Interaction.**

- UI/UX design for AR environments.
- 2D/3D content placement and animation.

- Human-computer interaction in AR.
- Spatial design and storytelling in AR apps.

***Project Demo*:**

- Build a simple marker-based AR app with Unity and Vuforia.

**Unit IV Applications of AR.**

- Education and Training: Immersive learning modules.
- Retail and Marketing: Virtual try-on, product visualization.
- Tourism and Heritage: Site reconstructions and guided tours.
- Healthcare and Surgery: Overlay-based diagnosis and visualization.
- Industrial and Military: Maintenance and field training tools.

***Case Studies*:**

- IKEA AR app, Google Lens, Snapchat filters, AR in Indian heritage sites.

**Unit V Ethical and Social Dimensions of AR.**

- Data privacy and surveillance concerns.
- Impact on cognition, behavior and social interaction.
- Inclusivity and accessibility challenges.
- Cultural sensitivities and digital overlays in sacred spaces.

***Discussion Topics*:**

- AR and the real–virtual boundary
- Guidelines from UNESCO and IEEE on immersive technologies

**Teaching Methodology:**

- Instructor-led lectures and concept demonstrations.
- Video-based tutorials and lab walkthroughs.
- AR app development mini projects.
- Critical review of AR case studies across domains.

**Suggested Tools & Platforms.**

- Unity3D with Vuforia.
- WebAR platforms like 8thWall or ZapWorks.
- ARCore and ARKit SDKs.
- Blender or Tinkercad for 3D content.

**Essential/Recommended Readings/Texts:**

1. Alan B. Craig – *Understanding Augmented Reality: Concepts and Applications.*
2. Dieter Schmalstieg & Tobias Hollerer – *Augmented Reality: Principles and Practice.*

**Online Resources:**

1. Unity Learn (AR Development Track)
2. Coursera AR/VR Specialization.
3. Google Developers ARCore Guide.
4. Apple Developer Documentation (ARKit)

**Credits - 2**
**Hours - 30**

## SEC 6: Introduction to Virtual Reality (VR)

**Course Objectives:**

1. To introduce foundational concepts, history and types of Virtual Reality (VR) systems.
2. To provide exposure to tools and frameworks used for creating immersive VR applications.
3. To develop critical understanding of human–computer interaction (HCI) in virtual environments.
4. To promote ethical thinking and awareness of VR's societal impacts.

**Learning Outcomes:**

After completion of the course, the students will:

1. Explain the evolution, principles and components of VR systems.
2. Differentiate between VR, AR and MR technologies.
3. Design and implement simple VR applications using development tools.
4. Evaluate the impact of VR in industries like education, healthcare and gaming.
5. Discuss ethical, cognitive and accessibility issues in immersive environments.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 6 | Introduction to Virtual Reality (VR) | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Virtual Reality.**

- Definition and scope of VR.
- Historical development and milestones.
- VR vs AR vs MR vs XR.
- Types of VR systems: fully immersive, semi-immersive, non-immersive.

- ***Reading*:**
  - *Virtual Reality* by Steven M. LaValle – Ch. 1

**Unit II VR System Architecture.**

- Hardware: HMDs, motion tracking, sensors, controllers.
- Software: Game engines, APIs, SDKs.
- Input/output systems and feedback mechanisms.
- Immersion, presence and interaction.

***Tools Introduced*:**

- Unity3D, Unreal Engine, Oculus SDK, SteamVR.

**Unit III Designing VR Experiences.**

- Elements of VR interaction design.

- Environment modeling and navigation.
- 3D UI/UX design principles.
- Spatial audio and haptics in VR.

- ***Assignment***:
  - Build a basic interactive VR scene using Unity and Google Cardboard.

**Unit IV Applications of VR.**

- Education and virtual labs.
- Healthcare: therapy, surgery simulation.
- Gaming and entertainment.
- Architecture, manufacturing and military simulations.

***Case Studies***:

- Oculus Quest apps, Google Earth VR, VR-based museum tours.

**Unit V Human Factors and Ethics in VR.**

- Cognitive and psychological effects.
- Motion sickness and safety concerns.
- Ethical considerations in virtual identities and data privacy.
- Accessibility and inclusion in VR content.

***Discussion Topics***:

- Metaverse ethics.
- VR addiction and attention economy.

**Teaching Methodology**

- Concept lectures + practical demos.
- Tutorials with Unity/Unreal Engine.
- Hands-on assignments and guided projects.
- Reflection sessions on VR ethics and social impact.

**Suggested Tools & Platforms**

- Unity 3D or Unreal Engine.
- Web XR or A-Frame (for lightweight web-based VR).
- Oculus Rift, Quest, or Google Cardboard (for testing).
- 3D model libraries (Sketchfab, Blender).

**Essential/Recommended Readings/Texts:**

1. Steven M. LaValle – *Virtual Reality.*
2. Jason Jerald – *The VR Book: Human-Centered Design for Virtual Reality.*

**Additional Readings:**

1. Unity Learn: XR Development Path.
2. VR/AR Association White Papers.
3. Online tutorials from Oculus, SteamVR and WebXR GitHub repos.

**Credits - 2**
**Hours - 30**

## SEC 7: Introduction to Digital Humanities in Sanskrit

**Course Objectives:**

1. To introduce the scope and significance of Digital Humanities (DH) with special reference to Sanskrit.
2. To explore tools, platforms and methods used in digitizing, analyzing and preserving Sanskrit texts.
3. To impart hands-on knowledge of digital tools for Sanskrit corpus analysis, lexicons and linguistic studies.
4. To examine case studies of digital editions, archives and research projects in Sanskrit.

**Learning Outcomes:**

After completion of the course, the students will:

1. Define the key concepts and historical evolution of Digital Humanities.
2. Explain the relevance of Digital Humanities in the context of Sanskrit studies.
3. Use digital tools and platforms for Sanskrit text processing and metadata tagging.
4. Critically analyze digital archives, text encoding and Sanskrit corpus projects.
5. Design basic digital projects related to Sanskrit literary or grammatical texts.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 7 | Introduction to Digital Humanities in Sanskrit | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Foundations of Digital Humanities.**

- What are Digital Humanities (DH)?
- Historical background and evolution.
- DH methods: digitization, annotation, encoding, markup.
- Digital Humanities in the Indian context.

***Readings*:**

- Schreibman, Siemens & Unsworth – *A Companion to Digital Humanities.*
- Articles on DH in India (IIIT-H, IGNCA, etc.).

**Unit II Sanskrit and the Digital Turn.**

- Role of Sanskrit in classical and modern knowledge systems.
- Challenges and prospects of digitizing Sanskrit texts.
- Unicode, Romanization schemes (IAST, **ISO 15919,** etc.).
- Text repositories: GRETIL, Muktabodha, Sanskrit Documents, etc.

***Tools Introduced*:**

- Sanskrit OCR tools, transliteration tools (Sanscript, Aksharamukha)

**Unit III Text Encoding and Corpus Linguistics.**

- Introduction to TEI (Text Encoding Initiative) for Sanskrit.
- XML and metadata tagging basics.
- Corpus creation and linguistic annotation.
- Sanskrit lexicon and grammatical databases: Monier-Williams, INRIA Sanskrit Treebank, etc.

***Hands-on*:**

- Encoding a short shloka using TEI/XML.
- Querying Sanskrit lexical databases.

**Unit IV Digital Projects and Applications.**

- E-text archives: SARIT, BORI, Digital manuscripts.
- Digital editions and commentaries.
- Computational Paninian Grammar.
- Interdisciplinary applications: Computational linguistics, cultural analytics, AI training corpora.

**Case Studies:**

- Sanskrit Heritage Engine (INRIA)
- Vedic Heritage Portal (IGNCA)
- Digital Corpus of Sanskrit (Heidelberg)

**Unit V Designing a Digital Humanities Project in Sanskrit.**

- Project planning and research questions.
- Licensing and open-access publication.
- Tools for digital storytelling (StoryMapJS, Scalar, Omeka).
- Ethics of digitization and cultural preservation.

***Mini Project*:**

- Plan a small DH project on a Sanskrit literary or shastric theme.
- Annotate and encode 5–10 shlokas with metadata.

**Teaching Methodology:**

- Conceptual lectures with demos.
- Hands-on lab sessions (code walkthroughs, encoding tasks).
- Review of live Sanskrit DH projects.
- Group discussion and peer evaluation.

**Tools & Platforms Suggested:**

- TEI/XML.
- Aksharamukha Transliterator.
- Sanskrit Heritage Engine.
- Scalar / Omeka / StoryMapJS.
- INRIA Sanskrit Treebank.

**Essential/Recommended Readings/Texts:**

- *A Companion to Digital Humanities* – Schreibman, Siemens, Unsworth
- *Text Encoding Initiative: Guidelines for Electronic Text Encoding and Interchange*
- *Computational Paninian Grammar* – IIT Kanpur/INRIA

**Online Resources:**

- **GRETIL**
- **Sanskrit Heritage Engine**
- **Muktabodha Digital Library**
- **SARIT**

Credits - 2
Hours - 30

## SEC 8: IT Skills and Data Analysis

**Course Objectives:**

1. To familiarise the student with the quantitative skills required for representing and interpreting data for the purpose of decision making.
2. To equip them with some fundamental concepts, which play a critical role in understanding and visualizing real world data using relevant IT tools.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Represent and interpret data in tabular and graphical forms.
2. Understand and interpret the measures of central tendency and dispersion.
3. Use IT tools such as spreadsheets to visualise and analyse data.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 8 | IT Skills and Data Analysis | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Statistics.**

- Concept of datasets (Variables, Observations)
- Different types of variables (Quantitative and Qualitative)
- Distinction between primary and secondary sources of data.
- Basic idea of using questionnaire to collect primary data for analysis.
- How to construct a questionnaire, Concept of frequency distribution: cumulative and relative frequencies.
- Introduction to spreadsheet, tabular and graphical presentation of data.
- Data tables, frequency curve, histogram, bar graphs, pie charts (through the use of spreadsheets)

**Unit II Measures of Central Tendency and Dispersion.**

- Measures of central tendency: mean, median, mode.
- Examples of situations where it is appropriate to use the mean, median and mode as a measure of central tendency.
- Weighted mean; Measures of dispersion: range, variance, standard deviation.
- Quartiles, deciles and percentiles.
- Visualize the measures of central tendency and dispersion through frequency curve and histogram.
- Skewness and kurtosis; Normal curve and its basic properties.
- Visual representation of population characteristics (height, weight, IQ etc.)

**Essential/Recommended Readings/Texts:**

1. Levin, R., Rubin, D. S., Rastogi, S., & Siddiqui, M. H. (2014). *Statistics for management* (7th ed.). Pearson Education.
2. Rowntree, D. (2018). *Statistics without tears: A primer for non-mathematicians*. Allyn and Bacon.

**Additional Readings:**

1. https://data.worldbank.org/
2. https://www.statista.com/
3. https://data.gov.in/
4. https://censusindia.gov.in/
5. https://www.kaggle.com/
6. http://data.un.org/

Credits - 2
Hours - 30

## SEC 9: Basic IT Tools

**Course Objectives:**

1. To develop IT skills.
2. To equip them with basic computing skills.
3. To enhance their employability in general.
4. To enable them to analyse and present information in a meaningful manner.

**Learning Outcomes:**

After completion of the course, the students will:

1. Use word-processor to generate documents with appropriate formatting, layout, review and referencing.
2. Manage data in worksheets and workbooks and analyze it using spreadsheet functions and inbuilt formulas.
3. Perform analysis on data using spreadsheets to make decisions.
4. Make meaningful representations of data in the form of charts and pivot tables.
5. Manage data in database tables and use the same for generating queries, forms and reports.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 9 | Basic IT Tools | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Spreadsheets.**

- Spreadsheets: Concept of worksheets and workbooks, creating, opening, closing and saving workbooks, moving, copying, inserting, deleting and renaming worksheets, working with multiple worksheets and multiple workbooks, controlling worksheet views, naming cells using name box, name create and name define.
- Exchanging data using clipboard, object linking and embedding; Printing and Protecting worksheets.
- Adjusting margins, creating headers and footers, setting page breaks, changing orientation, creating portable documents and printing data and formulae.
- Implementing file level security and protecting data within the worksheet.
- Understanding absolute, relative and mixed referencing in formulas, referencing cells in other worksheets and workbooks, correcting common formula errors, working with inbuilt function categories like mathematical, statistical, text, lookup, information, logical, database, date and time and basic financial functions.

**Unit II Data Analysis in Spreadsheets.**

- Consolidating worksheets and workbooks using formulae and data consolidate command.

- Choosing a chart type, understanding data points and data series, editing and formatting chart elements and creating sparkline graphics, Analysing data using pivot tables.
- Creating, formatting and modifying a pivot table, sorting, filtering and grouping items, creating calculated field and calculated item, creating pivot table charts, producing a report with pivot tables.
- Introduction to recording and execution of macros.

**Unit III Word Processing.**

- Introduction: Creating and saving your document, displaying different views, working with styles and character formatting, working with paragraph formatting techniques using indents, tabs, alignment, spacing, bullets and numbering and creating borders.
- Page setup and sections: Setting page margins, orientation, headers and footers, end notes and foot notes, creating section breaks and page borders.
- Working with tables: Creating tables, modifying table layout and design, sorting, inserting graphics in a table, table math, converting text to table and vice versa.
- Create newspaper columns, indexes and table of contents, Spell check your document using inbuilt and custom dictionaries, checking grammar and style, using thesaurus and finding and replacing text.
- Create bookmarks, captions and cross referencing, adding hyperlinks, adding sources and compiling and bibliography.
- Mail merge: Creating and editing your main document and data source, sorting and filtering merged documents and using merge instructions like ask, fill-in and if-then-else.
- Linking and embedding to keep things together.

**Unit IV Databases.**

- Introduction to Database Development: Database Terminology, Objects, Creating Tables, working with fields, understanding Data types, Changing table design, Assigning Field Properties, Setting Primary Keys, using field validation and record validation rules, Indexing, working with multiple tables, Relationships & Integrity Rules, Join Properties, Record manipulation, Sorting & Filtering; Select data with queries.
- Creating Query by design & by wizard (Select, Make Table, Append, Delete, Cross Tab, Update, Parameterized Query, Find Duplicate and Find Unmatched), Creating multi table queries, creating & working with table joins. Using operators & expressions: Creating simple & advance criteria.
- Working with forms: Creating Basic forms, working with bound, unbound and calculated controls, understanding property sheet, Working with Data on Forms: Changing Layout, creating Sub Forms, creating list box, combo box and option groups.
- Working with Reports: Creating Basic Reports, Creating Header & Footer, Placing Controls on reports, sorting & grouping, Creating Sub reports.

**Essential/Recommended Readings/Texts:**


1. Swinford, E., Dodge, M., Couch, A., Melton, B. A. (2013). Microsoft Office Professional 2013. United States: O'Reilly Media.
2. Wang, W. (2018). *Office 2019 For Dummies*. United States: Wiley. Microsoft Lambert, J. (2019).
3. Microsoft Word 2019 Step by Step. United States: Pearson Education.


**Additional Readings:**


1. Jelen, B. (2013). *Excel 2013 Charts and Graphs*. United Kingdom: Que.
2. Alexander, M., Jelen, B. (2013). *Excel 2013 Pivot Table Data Crunching*. United Kingdom: Pearson Education.
3. Alexander, M., Kusleika, R. (2018). *Access 2019 Bible*. United Kingdom: Wiley.

Credits - 2
Hours - 30

## SEC 10: Personal Financial Planning

**Course Objectives:**

1. To familiarize the students with different aspects of personal financial planning like savings, investment, taxation, insurance and retirement planning.
2. To develop the necessary knowledge and skills for effective financial planning.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the meaning and appreciate the relevance of financial planning.
2. Understand the concept of investment planning and its methods.
3. Examine the scope and ways of personal tax planning.
4. Analyse insurance planning and its relevance.
5. Develop insight into retirement planning and its relevance.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 10 | Personal Financial Planning | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Financial Planning.**

- Financial goals, steps in financial planning, budgeting incomes and payments, time value of money.
- Introduction to savings, benefits of savings, management of spending & financial discipline, setting alerts and maintaining sufficient funds for fixed commitments.

**Unit II Investment Planning.**

- Process and objectives of investment, concept and measurement of return & risk for various asset classes, measurement of portfolio risk and return, diversification & portfolio formation.
- Gold bond; Real estate; Investment in greenfield and brownfield Projects.
- Investment in fixed income instruments, financial derivatives & commodity market in India.
- Mutual fund schemes; International investment avenues.
- Currency derivatives and digital currency.

**Unit III Personal Tax Planning.**

- Tax structure in India for personal taxation, Scope of personal tax planning, exemptions and deductions available to individuals under different heads of income and gross total income.
- Comparison of benefits - Special provision u/s 115 BAC vis-à-vis General provisions of the Income-tax Act, 1961, tax avoidance versus tax evasion.

**Unit IV Insurance Planning.**

- Need for insurance.
- Life insurance, health insurance, property insurance, credit life insurance and professional liability insurance.

**Unit V Retirement Benefits Planning.**

- Retirement planning goals, process of retirement planning, Pension plans available in India, Reverse mortgage, Estate planning.

**Practical Exercises:**

The learners are required to:

- Perform electronic fund transfers through net banking and UPI.
- Identify certain recent Ponzi schemes in the market.
- Prepare tax planning for a hypothetical individual.

**Essential/Recommended Readings/Texts:**


1. Halan, M. *Let's talk money: You've worked hard for it; now make it work for you*. New York: Harper Collins Publishers.
2. Indian Institute of Banking & Finance. *Introduction to financial planning*. New Delhi: Taxmann Publication.
3. Keown, A. J. *Personal finance*. New York: Pearson.
4. Madura, J. *Personal finance*. New York: Pearson.
5. Pandit, A. *The only financial planning book that you will ever need*. Mumbai: Network 18 Publications Ltd.
6. Sinha, M. *Financial planning: A ready reckoner*. New York: McGraw Hill Education.
7. Tripathi, V. *Fundamentals of investment*. New Delhi: Taxmann Publication.

Credits - 2
Hours - 30

## SEC 11: Temple Trade and Commerce

**Course Objectives:**

1. To uncover the plethora of opportunities the temples in India offer.
2. To understand that the temples of India are not only a spiritual abode but are also great economic hubs.
3. To help the students understand and appreciate the contribution of these temples to the socio- economic development of the country.

**Learning Outcomes:**

After completion of the course, the students will:

1. Recognize the historical and architectural significance of Indian temples, mapping their regional diversity, rituals and symbolic functions.
2. Examine the evolution of temple trade and management, assessing its future prospects and highlighting the symbiotic relation between temple and trade.
3. Analyze the socio-cultural impact of Indian temples, exploring their contribution in shaping traditions, rituals and cultural identity beyond spirituality.
4. Evaluate temples as economic hubs, understanding their impact on trade, tourism, donations and digitalization in temple management.
5. Assess the sustainable practices of Indian temples, exploring eco-spirituality, circular economy and environmentally conscious temple architecture and tourism.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 11 | Temple Trade and Commerce | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Temples of Bharat.**

- Temple types.
- Mapping of major temples of India.
- Significant regional temples across India and their specific rituals, festivals and symbolic functions.
- Unique temples of India.

**Unit II Introduction to Temple Trade.**

- Meaning, brief history, future prospects of temples in Bharat.
- Temple Management.
- Symbiotic relation between temples and trade.
- Temples: Connecting past with the present.

**Unit III Socio-cultural impact of Temples.**

- Analyzing Temples beyond Spirituality.
- Social Significance of Temples.

- Contribution of Temples in shaping the Indian culture.
- Significant regional rituals and cultures.

**Unit IV Temples as Economic Hub.**

- Temples as facilitators for trade.
- Contribution of Merchants to temples.
- Temples and trade network.
- Temple Economics.
- A trajectory to local progress and nation's growth.
- Temple Tourism and its impact on GDP.
- Accounting for Temples: From Donations to Gold.
- Digitalization of temples.

**Unit V Sustainable practices of Temples.**

- Introduction to Eco-Spirituality.
- Eco-friendly and sustainable practices of Temples.
- Sustainability in Temple Architecture and Temple tourism.

**Practical Exercises:**

1. Visit the regional temples across India, wherever possible.
2. Study the temple management systems across India.
3. Study how temples manage tourism in a sustainable way.
4. Mark the temples of India across the map of India.
5. Study the economic impact of temples.
6. Take a case study of socio-cultural impact of temples.
7. Evaluate the digitalization progress of temples across India.
8. Evaluate the sustainable practices adopted by temples across India since time immemorial.

**Essential/Recommended Readings/Texts:**


1. Prasad, P. C. (1977). *Foreign trade and commerce in ancient India*. Abhinav Publications.
2. Chandra, M. (1977). *Trade and trade routes in ancient India*. Abhinav Publications.
3. Iyer, S. (2018). *The economics of religion in India*. Harvard University Press.
4. Chakravarti, R. (2020). *Trade and traders in early Indian society*. Routledge.


**Additional Readings:**


1. Wyatt, A. (2005). *Building the temples of postmodern India: economic constructions of national identity*. Contemporary South Asia, 14(4), 465-480.
2. Talbot, C. (1991). *Temples, donors and gifts: patterns of patronage in thirteenth-century South India*. The Journal of Asian Studies, 50(2), 308-340.
3. Patnaik, S. K. (2014). *Puri: A Study of Early Trade and Pilgrim Routes*. Orissa Overview, 103-109: - https://magazines.odisha.gov.in/Orissareview/2014/Jun/engpdf/103-109.pdf

Credits - 2
Hours - 30

## SEC 12: e-Filing of Returns

**Course Objectives:**

1. To equip students with the practical skills required for filing of returns under Income Tax Laws.

**Learning Outcomes:**

After completion of the course, the students will:

1. Examine the basic concepts of income tax applicable to an individual assesse.
2. Analyse the provisions when business or professional income is computed on estimated basis.
3. Electronically furnish the return of income using various ITR forms, reflecting IT Skills.
4. Analyse the provisions of TDS.
5. Demonstrate proficiency in the use of e-filing system by electronically furnish the TDS returns.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 12 | e-Filing of Returns | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Income tax: An Overview.**

- Incomes taxable under different heads, deductions available from gross total income.
- computation of total income and tax liability of individuals, PAN and due date of filing of income tax return.
- Provisions related to advance payment of tax.
- New tax regime for individuals.

**Unit II Maintenance of accounts, audit and taxation on presumptive basis.**

- Provisions of maintenance of accounts by certain persons carrying on profession or business [Sec.44AA]
- Provisions of audit of accounts of certain persons carrying on business or profession [Sec.44AB]
- Special provision for computing profits and gains of business on presumptive basis [Sec.44AD]
- Special provision for computing profits and gains of profession on presumptive basis [Sec.44ADA]
- Special provision for computing profits and gains of business of plying, hiring or leasing goods carriages [Sec. 44AE].

**Unit III e-Filing: Conceptual framework and filing of Income Tax Returns.**

- Meaning and merits of e-Filing.
- Filing of income tax returns in ITR-2, ITR-3, ITR-4, ITR-5 and ITR-U.

**Unit IV Tax Deducted at Source.**

- Provisions relating to TDS.
- Schedule for deposit of TDS.
- Schedule for submission of TDS returns.
- Exemption from TDS: Form 13, 15G and 15H.

**Unit V e-Filing of TDS returns.**

- Prescribed forms for filing of TDS returns.
- Practical workshop on e-filing of TDS returns [Form24Q and Form 26Q].

**Practical Exercises:**

1. Discuss relevant provisions of the Income-tax Act, 1961 from the official website of Government of India.
2. Refer the Finance Act to know about the amendments done in various provisions of the Income-tax Act, 1961.
3. Refer relevant notifications and circulars from the official website of Government of India.
4. Do hands on training to furnish ITRs on the official e-filing website of the Government of India i.e., www.incometax.gov.in and
5. Do hands-on training to furnish TDS returns at https://www.tinnsdl.com/services/etds-etcs/etds-rpu.html

**Essential/Recommended Readings/Texts:**


1. Ahuja, Girish and Gupta, Ravi. Systematic Approach to Income Tax. Flair Publications Pvt.Ltd., Delhi.
2. Mittal, Naveen. Concept Building Approach to Income Tax Law & Practice. Cengage Learning India Pvt. Ltd., Delhi.
3. Singhania, Vinod K. and Singhania, Monica. Students' Guide to Income Tax. University Edition. Taxmann Publications Pvt. Ltd., Delhi.

Credits - 2
Hours - 30

## SEC 13: Leadership Development

**Course Objectives:**

1. To provide an understanding of various leadership theories.
2. To enable learners to differentiate between different leadership styles.
3. To help learners analyze the applicability of various leadership styles in real-life situations.
4. To assist future leaders in selecting appropriate leadership styles for specific scenarios in their professional or personal lives.
5. To develop the ability to adapt leadership approaches based on context and needs.

**Learning Outcomes:**

After completion of the course, the students will:

1. Describe the concept of leadership and analyze various leadership theories from both western and Bharatiya perspectives.
2. Evaluate different leadership theories and their application in appropriate situations.
3. Demonstrate the role of culture and leadership essential for effective decision-making and team management.
4. Analyze the emergence of E-leadership, its significance and use of appropriate technology for accomplishment of objectives.
5. Conduct case studies on contemporary leaders to take lessons on their vision, leadership styles and ways to manage their people effectively.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 13 | Leadership Development | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction.**

- Meaning of Leadership, definitions of leadership, significance of leadership, qualities of a leader.
- Difference between leadership and management, basic styles of leadership – autocratic, democratic, laissez faire (their meaning, features, advantages, disadvantages and suitability)
- Rensis Likert styles of management, Tanenbaum and Schmidt Model.
- Bharatiya Leaders and their leadership styles.

**Unit II Theories of Leadership.**

- Traditional Theories - Great Man Theory, Trait Theory.
- Behavioural Theories - Ohio Studies, Michigan Studies, Managerial Grid.
- Contingency theories - Fiedler's Theory, Hersey and Blanchard Situational Model.
- Path Goal Theory, Transformational Leadership, Transactional Leadership, Charismatic Leadership, Servant Leadership, Ethical Leadership.

**Unit III Culture and Leadership.**

- Trompenaars Cultural Dimensions, Hofstede 's study on culture, Hall 's Cultural Theory.
- GLOBE Model: Global Leadership and organisational Behaviour Effectiveness, organisation Culture and Leadership.
- OCTAPACE profile by Uday Parekh - Openness, Collaboration, Trust, Autonomy, Proactive, Authenticity, Confrontation, Experimentation.

**Unit IV E Leadership.**

- Meaning, definition, need and significance.
- especially pre covid, during covid and post covid.
- social media and leadership, use of whatsapp, emails, facebook, LinkedIn, twitter, Instagram, google meet, MS Teams, zoom for electronically connecting the team and the leaders.
- using collaborative tools like google drive (docs, forms etc.) online.

**Unit V Contemporary Leaders.**

- Cases on contemporary leaders like Narendra Modi, Indra Nooyi, Ratan Tata, Narayan Murthy.

**Practical Exercises:**

1. Identify a Leader of your choice, prepare and present a report highlighting the important traits that have contributed to the effectiveness of that Leader. (Should be done in a team)
2. Movie screening of movies like Mission Mangal, Lagaan, Chak De, Rock On, Lakshya, Super 30 etc, open house for discussing the movie and a report/ presentation on lessons learnt from the movie.
3. Administering Fidler 's Least Preferred Coworker scale in the class on all the students to make sure that they understand the theory well.
4. Administering Managerial Grid questionnaire in order to help students assess their style of leadership.
5. Practice using collaborative tools online like google docs, mind meister etc.

**Essential/Recommended Readings/Texts:**


1. Robbins, S. P., Judge, T. A., & Vohra, N. (2018). *Organizational Behaviour* (18 ed.). Pearson.
2. Willink, J. (2020). *Leadership Strategy and Tactics: Field Manual*. New York: Macmillan Publishers.
3. Chhabra, T. N. *Business organisation and management*. New Delhi: Sun India Publications.
4. Day, D. V. *The Oxford handbook of leadership and organisations*. New York: Oxford University Press.
5. Hughes, R. L., Ginnett, R., & Gordon, C. *Leadership: Enhancing the lessons of experience* (9th ed.). New York: McGraw Hill Education.
6. Gupta, C. B. *Business organisation & management*. New Delhi: Sun India Publications.

7. Koontz, H., & Weihrich, H. *Essentials of management: An international and leadership perspective*. Paperback.
8. Mittal, R. *Leadership: Personal effectiveness and team building*. Uttar Pradesh: Vikas Publishing House Pvt. Ltd.
9. Nooyi, I. K. *My life in full: Work, family and our future*. New Delhi: Penguin.
10. Northouse, P. *Leadership: Theory and practice*. California: SAGE Publications Inc.

**Additional Readings:**

1. https://repository.iimb.ac.in/bitstream/2074/11692/1/Reddy_VKPA_2011_Vol.36_Iss.3.pdf
2. https://icmrindia.org/casestudies/Case_Studies.asp?cat=Leadership%20and%20Entrepreneurship
3. https://hbr.org/2010/03/leadership-lessons-from-india

**Credits - 2**
**Hours - 30**

## SEC 14: Artificial Intelligence & Natural language Processing

**Course Objectives:**

1. To introduce students to the basics of computer applications relevant to Sanskrit studies.
2. To provide knowledge of various software tools useful for word processing, data management and presentation.
3. To enable students to practically apply computer skills in academic and research-related Sanskrit works.

**Learning Outcomes:**

After completion of the course, the students will:

1. Gain foundational understanding of computer operations and applications.
2. Learn to use word processors, spreadsheets and presentation software effectively.
3. Apply computer-based tools in Sanskrit language processing, documentation and communication.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 14 | Artificial Intelligence & Natural Language Processing | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Basics of Computer and Operating System.**

- Introduction to computer, its characteristics and applications.
- Types of computers and components of computer system.
- Introduction to operating system and its functions.
- Basics of hardware and software.
- Introduction to file management and file types.

**Unit II Word Processing and Presentation Software.**

- Introduction to word processing software.
- Creating, formatting, editing, saving and printing documents.
- Working with tables, images and page layout.
- Introduction to presentation software and its features.
- Creating, designing and delivering presentations.

**Unit III Introduction to Spreadsheets and Databases.**

- Introduction to spreadsheet software and its features.
- Entering data, formatting cells, using formulas and functions.
- Introduction to database management system (DBMS).
- Concepts of tables, queries, forms and reports.
- Applications of database systems in academic and research work.

**Unit IV Computer Application in Sanskrit Studies.**

- Use of computer in Sanskrit typing and text editing.
- Unicode and Devanagari fonts installation and usage.
- Digital tools for Sanskrit text transliteration and text processing.
- Introduction to e-resources: Digital libraries, online dictionaries, Sanskrit corpus, etc.
- Application of computer tools in Sanskrit research, publication and communication.

**Essential/Recommended Readings/Texts:**


1. Norton, P. *Introduction to computers*.
2. Shelly, G. B., & Vermaat, M. E. *Microsoft Office 2010*.
3. Sinha, P. K. *Computer fundamentals*.


**Additional Readings:**


1. *Sanskrit Computational Tools and Techniques*.
2. Online resources (*Digital Library of India, GRETIL, Sanskrit Lexicons*, etc.).
3. Manuals and guides on *Unicode* and *Devanagari typing tools*.

Credits - 2
Hours - 30

## SEC 15: Digital-Based Models for Sanskrit Learning and Communication

**Course Objectives:**

1. To familiarize students with essential digital tools for Sanskrit studies.
2. To enable students to effectively utilize MOOCs and LMS platforms for Sanskrit learning.
3. To equip students with the skills to create vlogs and blogs for Sanskrit communication.

**Learning Outcomes:**

After completion of the course, the students will:

1. Demonstrate proficiency in utilizing digital tools for Sanskrit studies.
2. Effectively navigate MOOCs and LMS platforms for Sanskrit learning.
3. Create engaging vlogs and blogs to enhance Sanskrit communication skills.
4. Exhibit an understanding of how these digital strategies contribute to their overall proficiency in Sanskrit language acquisition and communication.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 15 | Digital-Based Models for Sanskrit Learning and Communication | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Digital Tools for Sanskrit Studies.**

- Introduction to various digital learning tools for Sanskrit studies.
- Sanskrit Grammar learning tools and Sanskrit learning apps.
- Sanskrit OCR (Optical Character Recognition) software.
- Sanskrit research portals and the Digital Library of India (DLI).
- Transliteration tools and techniques of Sanskrit text digitalization.
- Practical algorithms for Shastras (e.g., Sandhi, Samasa, Pratyahara formation, etc.).

**Unit II MOOCs and LMS for Sanskrit Learning.**

- Introduction to Massive Open Online Courses (MOOCs) and their role in promoting Sanskrit education globally.
- Study of various courses available by different universities as MOOC courses and their applicability.
- Overview of major initiatives and platforms for MOOCs.
- Comparative analysis of Sanskrit courses available on popular MOOC platforms such as NPTEL and SWAYAM.

**Unit III Vlogs and Blogs for Sanskrit Communication.**

- Understanding the potential of vlogs and blogs in promoting Sanskrit language and culture.
- Techniques for creating educational vlogs on Sanskrit topics: scripting and editing.

- Video production techniques and editing tools.
- Setting up and customizing a Sanskrit-focused blog using blogging platforms such as WordPress or Blogger.
- Writing and publishing engaging blog posts on Sanskrit literature, grammar and cultural heritage.
- Ethical considerations and best practices for communicating Sanskrit content through vlogs and blogs.

**Essential/Recommended Readings/Texts:**


1. Holmes, B., & Gardner, J. (2006). *E-Learning: Concepts and practice*.
2. Conole, G. *Contemporary perspectives in E-Learning research*.

Credits - 2
Hours - 30

## SEC 16: Fundamentals of Computer Systems & Word Processors with Unicode.

**Course Objectives:**

1. To introduce the basic concepts of computer fundamentals and applications.
2. To develop understanding of word processing, spreadsheets and presentation software.
3. To enable application of computer skills in Sanskrit-related academic and research work.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the fundamentals of computers and operating systems.
2. Acquire practical skills in word processing, spreadsheet management and presentation preparation.
3. Able to apply digital tools in Sanskrit typing, documentation and communication.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 16 | Fundamentals of Computer Systems & Word Processors with Unicode. | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Basics of Computer.**

- Introduction to computer: definition, characteristics, applications.
- Components of computer: hardware and software.
- Input and output devices.
- Introduction to operating system and file management.

**Unit II Word Processing.**

- Introduction to word processing software and features.
- Creating, saving, opening and formatting documents.
- Working with tables, images, headers, footers and page layouts.
- Printing documents and working with templates.

**Unit III Spreadsheets.**

- Introduction to spreadsheet software and its applications.
- Entering and formatting data.
- Using formulas, functions, charts and graphs.
- Sorting, filtering and analyzing data.

**Unit IV Presentation Software.**

- Introduction to presentation software and its applications.

- Creating, designing and formatting slides.
- Adding multimedia elements (images, audio, video)
- Animations, transitions and delivering presentations.

**Essential/Recommended Readings/Texts:**

1. Introduction to Computers by Peter Norton.
2. Microsoft Office 2010 by Gary B. Shelly and Misty E. Vermaat.
3. Computer Fundamentals by P.K. Sinha.

**Additional Readings:**

1. Online resources (Digital Library of India, GRETIL, Sanskrit lexicons, etc.)
2. Manuals and guides on Unicode and Devanagari typing tools.
3. Sanskrit Computational Tools and Techniques — (to be prescribed by instructor)

Credits - 2
Hours - 30

## SEC 17: Web Designing with HTML, CSS and XML

**Course Objectives:**

1. To introduce the fundamental concepts of internet and web-based applications.
2. To provide knowledge of email, e-resources and online collaboration tools.
3. To enable practical application of internet-based tools for Sanskrit studies and research.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the basic concepts of internet, websites and browsers.
2. Acquire skills in using email, search engines and online databases.
3. Effectively utilize online resources and tools for Sanskrit-related academic activities.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 17 | Web Designing with HTML, CSS and XML | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Internet.**

- Basic concepts of internet, intranet and extranet.
- Introduction to web browsers, websites and URLs.
- Understanding web servers and hosting.
- Introduction to web-based applications.

**Unit II Email and E-resources.**

- Introduction to email and email service providers.
- Creating, sending, receiving and managing emails.
- Introduction to e-resources: e-journals, e-books and digital libraries.
- Accessing and utilizing online Sanskrit resources.

**Unit III Search Engines and Databases.**

- Introduction to search engines and searching techniques.
- Using advanced search operators and search filters.
- Introduction to online academic databases.
- Searching Sanskrit texts and literature in digital databases.

**Unit IV Online Collaboration Tools.**

- Introduction to online collaboration tools and platforms.
- Using cloud storage and file sharing applications.
- Collaborative writing and editing tools.

- Participating in online forums, discussion groups and webinars.

**Essential/Recommended Readings/Texts:**


1. Bangia, R. *Internet Basics*.
2. Sinha, P. K. *Computer Fundamentals*.
3. Online resources related to Sanskrit digital libraries and databases (to be specified by instructor).


**Additional Readings:**


1. Manuals and guides on email and cloud-based applications.
2. Online tutorials on search engines and databases.
3. Resources on collaborative tools (Google Docs, OneDrive, etc.).

Credits - 2
Hours - 30

## SEC 18: Indian Epigraphy & Paleography

**Course Objectives:**

1. To introduce students to the significance of Sanskrit inscriptions as key sources for reconstructing ancient Indian history.
2. To familiarize students with the methods of reading, interpreting and understanding Sanskrit inscriptions in their historical context.
3. To enable Sanskrit students to extract historical facts and cultural information directly from primary epigraphical materials.
4. To help History students engage critically with primary inscriptions to deepen their understanding of ancient Indian political, social and cultural developments.
5. To develop in students the ability to integrate linguistic skills, epigraphical methods and historical analysis for holistic historical research.

**Learning Outcomes:**

After completion of the course, the students will:

1. Students will understand the importance of Sanskrit-based inscriptions in reconstructing ancient Indian history.
2. Sanskrit students will enhance their ability to interpret historical facts directly from inscriptions.
3. History students will develop a deeper connection with primary materials related to the history of ancient India.
4. Students will be able to analyze and interpret inscriptions as essential historical sources.
5. The course will equip students with the skills to bridge the gap between language, epigraphy and historical research.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 18 | Indian Epigraphy & Paleography | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I**

- Welfare state.
- Repair Of Dam.
- Mati-saćiva.
- Karma-saciva in Junagadh Inscription of Rudradāman.

**Unit II**

- Eran Pillar Inscription: Status of Samudragupta.
- Meharauli Iron Pillar Inscription of Candra: Victory, Recognition of Chandra.

**Unit III**

- Antiquity of writing in India.
- Observations from foreign scholars.
- Literary evidences.
- Observations made by Indian Epigraphists.
- Importance of the study of Inscriptions.
- Geographical description.
- Historical evidences.
- Society.
- Religion.
- Literature.
- Economic Conditions.
- Administration.

**Writing material:**

a) Rocks.
b) Pillars.
c) Metal Plates Brush, Chisel, Stylus, Paint/Colour.
d) Statues.
e) Pen.

**Unit IV**

- Origin of the Brahmi Script.
- Foreign Origin.
- Indian Origin.
- Development of the script up to 700 A.D.

**Essential/Recommended Readings/Texts:**


1. Bühler, G. (1896). *On the Origin of the Indian Alphabet & Numerals*. Calcutta: Asiatic Society.
2. Ojha, G. H. (1962). *Bhāratīya Prācīna Lipimālā*. Prayagraj: Hindi Sahitya Sammelan.
3. Dani, A. H. (1963). *Indian Paleography*. Delhi: Motilal Banarsidass.
4. Sircar, D. C. (1965). *Indian Epigraphy, Select Inscriptions (Part - I)*. Calcutta: University of Calcutta.
5. Pandey, R. B. (1972). *Asoka ke Abhilekha, Bhāratīya Puralipi*. Delhi: Rajkamal Prakashan.
6. Rana, S. S. (1983). *Bhāratīya Abhilekha*. Jaipur: University of Rajasthan.
7. Upadhyay, V. (1990). *Prācīna Bhāratīya Abhilekha*. Varanasi: Kashi Prakashan.

**Credits - 2**
**Hours - 30**

## SEC 19: Tools and Techniques for Computing Sanskrit Language

**Course Objectives:**

1. To introduce current research and development in Sanskrit computing.
2. To examine the tools and techniques developed under government and private funding for Sanskrit.
3. To explore new technologies and innovations in Sanskrit computing.
4. To understand the applications of Sanskrit computing in various fields, including language processing, preservation and education.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the basic concepts of Sanskrit Phonology, Morphology, Syntax, Semantics, Lexicon and Corpora.
2. Learn the origin and development of Language Computing, with a focus on Sanskrit.
3. Gain an introduction to computing Sanskrit language and its applications.
4. Explore various methodologies used in Language Technology, specifically for Sanskrit.
5. Study the tools developed for Sanskrit language processing and conduct a survey of Language Computing.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 19 | Tools and Techniques for Computing Sanskrit Language | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Major Components of Sanskrit Linguistics.**

- Phonology.
- Morphology.
- Syntax.
- Semantics.
- Lexicon and Corpora.

**Unit II Areas and Applications of the Sanskrit Language Computation.**

- Text Digitization/Content Creation and Search for Sanskrit.
- Speech Technology.
- Grammar Tools.
- Machine Translation.
- Preservation and Delivery of Cultural Heritage of Sanskrit.

**Unit III Language Computing Methodology.**

- Rule Base.

- Statistical.
- Hybrid.

**Unit IV Survey of Language Computing.**

- Survey of the Language Computing for Sanskrit.
- Survey of the Language Computing for Indo Aryan Languages.

**Essential/Recommended Readings/Texts:**


1. Jha, G. N. (1993). *Morphology of Sanskrit Case Affixes: A Computational Analysis*. M.Phil Dissertation, Centre of English and Linguistics, School of Language, Literature and Culture Studies, JNU.
2. Bharati, A., Chaitanya, V., & Sanghal, R. (1995). *Natural Language Processing: A Paninian Perspective*. New Delhi: Prentice Hall of India.
3. Grishman, R. (1986). *Computational Linguistics: An Introduction*. Cambridge: Cambridge University Press.
4. Jurafsky, D., & Martin, J. H. (2008). *Speech and Language Processing*. New Jersey: Prentice Hall.
5. Jha, G. N., Gopal, M., & Mishra, D. (2011). Annotating Sanskrit Corpus: Adapting IL-POSTS. In *Human Language Technology: Challenges for Computer Science and Linguistics* (Lecture Notes in Computer Science, Vol. 6562, pp. 371–379). Springer.
6. Chandra, S., & Jha, G. N. (2012). *Computer Processing of Nominal Inflections in Sanskrit: Methods and Implementations*. UK: CSP.
7. Thillaivanan, R. S. S. V. S., Narayanan, B. D., & Rao, T. P. S. N. (2015). *Sanskrit Computational Linguistics: A Survey*. Berlin: Springer.
8. Chandra, S. (2015). *maśīnī anuvāda (Machine Translation)*. New Delhi: Vidyanidhi Prakashana.
9. Nair, S. S. (2016). *Computational Linguistics and Sanskrit Language*. Cambridge: Cambridge University Press.
10. Hutchins, J., & Deshpande, A. R. (2017). *Machine Translation: A View from the Lexicon*. Cambridge: Cambridge University Press.
11. Tools developed by the Sanskrit Computational Linguistics Groups, School of Sanskrit and Indic Studies, Jawaharlal Nehru University, Department of Sanskrit, University of Delhi and University of Hyderabad; available at:
    https://sanskrit.jnu.ac.in/
    http://cl.sanskrit.du.ac.in.
    ttps://sanskrit.uohyd.ac.in/scl/

Credits - 2
Hours - 30

## SEC 20: Machine Translation: Tools and Techniques

**Course Objectives:**

1. To introduce the theoretical foundations of computer-based translation.
2. To familiarize students with the architecture and components of Machine Translation (MT) systems.
3. To explain the internal processes involved in machine translation.
4. To examine inter-module interactions within a typical MT system.
5. To provide practical exposure to MT tools and technologies.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the origin, evolution and foundational concepts of Machine Translation.
2. Demonstrate basic knowledge of MT systems, including architecture and functionality.
3. Compare human and machine translation approaches, identifying key differences and limitations.
4. Analyze methodologies used in MT systems and apply guidelines from platforms like Google and Bing.
5. Evaluate the challenges, effectiveness and future prospects of Machine Translation technologies

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 20 | Machine Translation: Tools and Techniques | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction and History of Machine Translation.**

- History and Survey of Machine Translation Systems.
- List of Major MT Systems for Indian Languages: Google Translate and Bing by Microsoft.

**Unit II Theoretical Concepts of Machine Translation.**

- Human vs Computer translation of languages.
- Basics of Machine Translation.
- Tools and Techniques of Machine Translation.
- Source and Target Language.

**Unit III Machine Translation (MT) Approaches.**

- Rule Base MT Transfer-based.
- Interlingual and Dictionary Based.

- Statistical MT Example Based MT.
- Hybrid MT.

**Unit IV Evaluation of MT.**

- Evaluation of MT.
- Challenges in Machine Translation.
- Ambiguity and Acceptability.

**Essential/Recommended Readings/Texts:**


1. Nirenburg, S., Carbonell, J., & Tomita, M. (1994). *Machine Translation: A Knowledge-Based Approach* (K. Goodman, Ed.). San Francisco, CA: Morgan Kaufmann Publishers Inc.
2. Kulkarni, A. (2002). Machine translation activities in India: A survey. In *Proceedings of Workshop on Survey on Research and Development of Machine Translation in Asian Countries*, Thailand, May 13–14.
3. Chandra, S. *Maśīnī Anuvād (Machine Translation)*. New Delhi: Vidyanidhi Prakashana.
4. Nirenburg, S., & Somers, H. L. (Eds.). (n.d.). *Readings in Machine Translation*. Massachusetts: MIT Press.
5. Koehn, P. *Statistical Machine Translation*. Cambridge: Cambridge University Press.

Credits - 2
Hours - 30

## SEC 21: Introduction to Ancient Indian Mathematics

**Course Objectives:**

1. To explore the rich heritage of ancient Indian mathematical concepts and achievements.
2. To study the contributions of mathematicians like Aryabhata, Brahmagupta and Bhaskara.
3. To understand the influence of ancient Indian mathematics on modern math.
4. To highlight key concepts such as zero, decimal system, algebra and trigonometry.

**Learning outcomes:**

After completion of the course, the students will:

1. Understand the historical and cultural context of ancient Indian mathematics.
2. Familiarize themselves with the fundamental mathematical concepts and techniques developed by ancient Indian mathematicians.
3. Analyze and interpret ancient Indian mathematical texts.
4. Recognize the contributions of ancient Indian mathematics to modern mathematical fields.
5. Appreciate the interconnectedness of ancient Indian mathematics with other areas of knowledge, including astronomy, philosophy and linguistics.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| SEC 21 | Introduction to Ancient Indian Mathematics | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Ancient Indian Mathematics.**

- Overview of ancient Indian mathematical traditions.
- Significance of ancient Indian mathematics in global mathematical history.
- Major mathematical works and their authors.

**Unit II Life and works of :-**

- Aryabhata.
- Brahmagupta.
- Bhaskaracharya.

**Unit III Contribution of :-**

- Aryabhata.
- Brahmagupta.
- Bhaskaracharya.

**Unit IV Some Essentials of ancient Mathematics.**

- Decimal place value system and its origins.
- Numerical notations and symbols used in ancient Indian mathematics.
- Basic arithmetic operations (addition, subtraction, multiplication, division) in ancient Indian mathematics.
- Geometrical concepts and constructions in ancient Indian mathematics.
- Connection between astronomy and mathematics in ancient India.

**Essential/Recommended Readings/Texts:**


1. Bhaskara II, B. (1987). *Lilavati and Bijaganita: The Works of Bhaskara II, Sanskrit Text and English Translation*. Delhi: Motilal Banarsidass Publishers.
2. Bhaskara II. (1995). *Siddhanta Shiromani*. Delhi: Motilal Banarsidass Publishers.
3. Narain, A. (1997). *Mathematics in Ancient India*. Cambridge: Cambridge University Press.
4. *The Sulba Sutras: The Geometry of the Vedic Altars*. (1999). Delhi: Motilal Banarsidass Publishers.
5. Brahmagupta. (2000). *Brahmasphutasiddhanta*. Delhi: Motilal Banarsidass Publishers.
6. Aryabhata. (2002). *Aryabhatiya*. Delhi: Motilal Banarsidass Publishers.
7. Srinivasa, R. (2002). *Aryabhata and his Contributions to Mathematics*. New Delhi: Kaveri Books.
8. Brahmagupta, B. (2004). *Brahmagupta's Mathematics: Translation and Commentary*. Delhi: Motilal Banarsidass Publishers.
9. Kumar, S. (2007). *Mathematics in India*. New Delhi: Oxford University Press.
10. Gupta, J. (2010). *The Indian Mathematical Tradition: A Historical Perspective*. Berlin: Springer.
11. *Ganita Sara Sangraha: The Essence of Mathematics*. (2014). New Delhi: Indian National Science Academy.
12. Agarwal, R. (2015). *Ancient Indian Mathematics: Geometry and Arithmetic*. New Delhi: New Age International Publishers.
13. Kapoor, S. (2019). *History of Indian Mathematics*. New Delhi: Bharati Bhawan Publishers.

**Credits - 2**
**Hours - 30**

## SEC 22: Reading skills in Brahmi Scripts

**Course Objectives:**

1. To introduce the interdisciplinary nature of Epigraphy & Script within Sanskrit, focusing on the development of the Brahmi script.
2. To study the transformation of the Brahmi script into modern Indian scripts like Tamil, Malayalam, Oriya, Bengali and Gurmukhi.
3. To examine ancient inscriptions in Sanskrit to aid in understanding historical developments.
4. To analyze the evolution of writing styles, materials and methods that led to variations in the Brahmi script.
5. To explore the influence of the Brahmi script on South-East Asian countries, particularly the Grantha form.

**Learning Outcomes:**

After completion of the course, the students will:

1. Investigate the development and transformation of the Brahmi script into a wide variety of forms over time.
2. Understand how slow modes of transport and communication influenced the evolution of the Brahmi script.
3. Analyze the variations in Brahmi script to ascertain the period of inscriptions whose date is uncertain.
4. Gain valuable knowledge that will assist in the study of archaeology with a background in Sanskrit.
5. Appreciate the significance of Brahmi script evolution in the historical and archaeological context.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| SEC 22 | Reading skills in Brahmi Scripts | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Brahmi Script (Origin and Development)**

**Unit II Early Brahmi alphabet Aśokan period.**

**Unit III Translation to variations up to 4th century C.E.**

**Unit IV Reading Asokan Inscriptions.**

**Essential/Recommended Readings/Texts:**


1. Upasak, C. S. (1960). *History & Paleography of Mauryan Brahmi Script*. Varanasi: Bharatiya Vidya Prakashan.
2. Dani, A. H. (1963). *Indian Paleography*. New Delhi: Motilal Banarsidass Publishers.
3. Pandey, R. B. (1967). *The Inscriptions of Ashoka*. New Delhi: Asian Educational Services.
4. Verma, T. P. (1971). *Paleography of Brahmi Script in North India*. New Delhi: Sundeep Prakashan.
5. Ojha, G. H. (1975). *Bhartiya Prachin Lipimala*. Varanasi: Prakashan Sansthan.

Credits 02
Hours 30

## SEC 23: Indian Epigraphy

**Course Objectives:**

1. To provide a foundational understanding of epigraphy as a discipline and its significance in the study of Indian history.
2. To explore the evolution of writing systems in India from ancient to medieval times.
3. To analyze inscriptions as primary sources for reconstructing political, social, economic and cultural aspects of Indian history.
4. To develop skills in deciphering and interpreting inscriptions and to understand the methods used in the conservation of epigraphic records.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the concept and scope of epigraphy.
2. Recognize the evolution and variety of writing systems in ancient India.
3. Identify different types of inscriptions and their characteristics.
4. Appreciate significant epigraphic discoveries and their historical value.
5. Analyze the linguistic aspects of inscriptions and their implications for cultural and historical studies.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| SEC 23 | Indian Epigraphy | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Indian Epigraphy.**

- Definition and Scope of Epigraphy: Understanding epigraphy and its importance in the study of history and archaeology.
- History of Writing in India: Evolution of early writing systems, including the Harappan script, Brahmi and Kharosthi.
- Types of Inscriptions: Classification based on material, language, script and content (royal edicts, religious records, donations, etc.).

**Unit II Development of Indian Scripts and Languages.**

- Brahmi Script: Its origins, development.
- Devanagari The transition from Brahmi to Devanagari.

**Unit III Selected Inscriptions – I.**

- Junagarh Inscription of Rudradaman.

**Unit IV Selected Inscriptions- II.**

- Meharauli Inscription of Chandra.
- Kotla Inscription of Viharbhadra.

**Essential/Recommended Readings/Texts:**


1. Bühler, G. (1898). *On the origin of the Indian Brahmi alphabet*. Calcutta: Asiatic Society of Bengal. Available at: https://archive.org/details/in.gov.ignca.16473
2. Sircar, D. C. (1965). *Indian epigraphy*. Delhi: Motilal Banarsidass Publishers.
3. Fleet, J. F. (1970). *Inscriptions of the early Gupta kings and their successors* (3rd ed.). Calcutta: Indological Book House. Available at: https://indianculture.gov.in/ebooks/corpus-inscriptionum-indicarum-voliii-inscriptions-early-gupta-kings-and-their-successors
4. Salomon, R. (1998). *Indian epigraphy: A guide to the study of inscriptions in Sanskrit, Prakrit and the other Indo-Aryan languages*. Oxford: Oxford University Press.
5. Mahadevan, I. (2003). *Early Tamil epigraphy: From the earliest times to the sixth century A.D.* Cambridge, MA: Harvard University Press.
6. Bühler, G. (2004). *Indian paleography*. New Delhi: Munshiram Manoharlal Publishers.
7. Venkatesan, G. (2005). *Introduction to Indian epigraphy and paleography*. Thanjavur: Tamil University Publications.

**Credits - 2**
**Hours - 30**

## SEC 24: Digital Empowerment

**Course Objectives:**

1. To develop an understanding of the digital world and the need for digital empowerment while creating awareness about the Digital India initiative.
2. To equip students with the skills to explore, communicate and collaborate in cyberspace while fostering awareness of cyber safety and security.

**Learning Outcomes:**

After completion of the course, the students will:

1. Use ICT and digital services in daily life.
2. Develop skills to communicate and collaborate in cyberspace using social platforms, teaching/learning tools.
3. Understand the significance of security and privacy in the digital world.
4. Evaluate ethical issues in the cyber world.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| SEC 24 | Digital Empowerment | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Digital inclusion and Digital Empowerment.**

- Needs and challenges; Vision of Digital India: Digi Locker, E-Hospitals, e-Pathshala, BHIM, e- Kranti (Electronic Delivery of Services}
- e-Health Campaigns; Public utility portals of Govt. of India such as RTI, Health, Finance, Income Tax filing, Education.

**Unit II Communication and Collahoration in the Cyberspace.**

- Electronic Communication: electronic mail, blogs, social media; Collaborative Digital platforms.
- Tools/platforms for online learning; Collaboration using file sharing, messaging, video conferencing.

**Unit III Towards Safe and Secure Cyberspace.**

- Online security and privacy.
- Threats in the digital world.
- Data breach and Cyber Attacks.
- Block chain Technology.
- Security Initiatives by the Govt of India.

**Unit IV Ethical Issues in Digital World.**

- Netiquettes.
- Ethics in digital communication.
- Ethics in Cyberspace.

**Practical Exercises:**

1. The course should be conducted in an interactive mode through demonstration, using appropriate tools.
2. Conduct workshops one-services initiated under Digital India.
3. Spread digital literacy/awareness amongst the vulnerable groups and marginalised sections of the society like street vendors, domestic help, security guards, senior citizens.
4. Students will take up team activities/ projects exploring digital services in the areas such as education, health, planning, farming, security, cyber security, financial inclusion and justice, e-Kranti.
5. Any other Practical/Practice as decided from time to time.

**Essential/Recommended Readings/Texts:**


1. Jones, R., & Hafner, C. (2021). *Understanding digital literacies: A practical introduction* (2nd ed.). Routledge.
2. https://www.digitalindia.gov.in
3. https://www.digilocker.gov.in
4. https://www.cybercrime.gov.in
5. https://www.cybersafeindia.in
6. https://www.meity.gov.in/cyber-surakshit-bharat-programme

श्रेयोऽङ्काः - 4
होराः - 60

## SEC 25: पञ्चाङ्गपूजनम्

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयसंस्कृतौ पौरोहित्यस्य महत्त्वबोधनम्।
2. विविधपूजाविधानानां बोधनम्।
3. विविधदेवतायाः पूजा-अभिषेकादिविधीनां प्रबोधनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. पञ्चाङ्गपूजनपुण्याहवाचनादीनां वाचनं कर्तुं शक्ष्यन्ति।
2. नवग्रहवास्तुसप्तशतीत्यादीनां पूजनक्रमं ज्ञास्यन्ति।
3. रुद्राभिषेकसत्यनारायणादिविधीन् ज्ञास्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| SEC 25 | पञ्चाङ्गपूजनम् | 01 | 0 | 01 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. पञ्चाङ्गपूजनम्।**

- गणपतिपूजनम्।
- वरुणपूजनम्।
- पुण्याहवाचनम्।
- मातृकापूजनम्।
- वसोर्धारा।
- आयुष्यमन्त्रजपः।
- नान्दीश्राद्धम्।

**अन्वितिः २. नवग्रहपूजनमखः।**

- अधिदेवताप्रत्यधिदेवतासहितनवग्रहपूजनम्।
- दशदिक्पालपूजनम्।
- सादुण्यदेवतापूजनम्।
- पञ्चभूसंस्कारपूर्वकम् अग्निस्थापनं पूजनञ्च।

- कुशकण्डिका।
- पूर्णाहुतिः।

**अन्वितिः ३. वास्तुपूजनादिविधिः, सप्तशतीपाठविधिः च।**

- वास्तुपुरुषपूजनम्।
- कर्माङ्गहोमः।
- वास्तुनिक्षेपः।
- नवार्णविधिः।
- सप्तशतीपाठविधिः।

**अन्वितिः ४. रुद्राभिषेकः, सत्यनारायणपूजनकथा च।**

- रुद्राष्टाध्यायीपाठपूर्वकं रुद्राभिषेकः।
- आशीर्वादः।
- सत्यनारायणपूजनं कथा, आरार्तिक्यं, मन्त्रपुष्पाञ्जलिश्च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. यज्ञदत्त दुर्गाशंकर शास्त्री, (1972), *बृहद्ब्रह्मनित्यकर्मसमुच्चयः*, मुंबई : बालुकेश्वर संस्कृत पाठशाला।
2. आचार्य धीरेन्द्र, (2011), *सत्यनारायण व्रतकथा*, दिल्ली : कान्हा धार्मिक प्रकाशन।
3. श्रीरामनारायणदत्त शास्त्री, *दुर्गासप्तशती*, गोरखपुर : गीताप्रेस।

श्रेयोऽङ्का: - 4
होरा: - 60

## SEC 26: पञ्चाङ्गं मुहूर्त्ताश्च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयसंस्कृतौ ज्योतिषशास्त्रस्य महत्त्वबोधनम्।
2. राशीनां, ग्रहाणां, मुहूर्त्तादीनाञ्च परिचयप्रदानम्।
3. ग्रहभेदग्रहमैत्रीग्रहस्वरूपादीनां प्रबोधनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. पञ्चाङ्गस्य मुहूर्त्तानां च ज्ञानम् अर्जयिष्यन्ति।
2. राशीनां ग्रहाणां च विषये ज्ञानं प्राप्स्यन्ति।
3. सामान्यज्योतिषशास्त्रस्य परिचयं प्राप्स्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| SEC 26 | पञ्चाङ्गं मुहूर्त्ताश्च | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. पञ्चाङ्गपरिचयः, मुहूर्ताः च।**

- तिथिः, वारः, नक्षत्रं, योगः, करणञ्च।
- जलाशयखननादिमुहूर्त्तः, शुभकार्येषु लग्नशुद्धिश्च।

**अन्वितिः २. मुहूर्ताः।**

- त्रिपुष्करयोगाः, रौद्रमुहूर्त्तः, श्वेतमुहूर्त्तः, मैत्रमुहूर्त्तश्च।
- सावित्रमुहूर्त्तः, वैराजमहूर्त्तः, अभिजितमुहूर्त्तः, रौहिणमुहूर्त्तश्च।
- विजयमुहूर्त्तः, वारुणमुहूर्त्तः, भगमुहूर्त्तश्च।

**अन्वितिः ३. लघुजातकम् (प्रथमाध्यायतः अरिष्टभङ्गाध्यायपर्यन्तम्)**

- राशिप्रभेदाध्यायः।
- ग्रहप्रभेदाध्यायः।
- ग्रहमैत्रीविवेकाध्यायः।
- ग्रहस्वरूपाध्यायः।
- गर्भाधानाध्यायः।
- सूतिकाध्यायः।
- अरिष्टाध्यायः।
- अरिष्टभङ्गाध्यायः।

**अन्वितिः ४. लघुजातकम् (आयुर्दायाध्यायतः ग्रन्थसमाप्तिपर्यन्तम्)**

- आयुर्दायाध्यायः।
- दशान्तर्दशाध्यायः।
- अष्टकवर्गाध्यायः।
- प्रकीर्णाध्यायः।
- नाभसयोगाध्यायः।
- स्त्रीजातकाध्यायः।
- निर्याणाध्यायः।
- नष्टजातकाध्यायः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. दैवज्ञवाचस्पति श्रीवासुदेव (सं.). (1882), *लघुजातकम्*, वाराणसी : ठाकुरप्रसाद पुस्तक मन्दिर।
2. अवस्थी, चण्डिकाप्रसाद (टीकाकार), एवं अवस्थी, रामयत्न (पं.). (2004), *मुहूर्तचिन्तामणि*, लखनऊ : नवलकिशोर प्रेस।
3. शर्मा, शिवकुमार (पं.) (सं.). (2012), *बृहद्वकहडाचक्रम्*, वाराणसी : भारतीय विद्या संस्थान।
4. शर्मा, कैलाशचन्द्र (डॉ.) (सं.). (2017), *बृहद्वकहडाचक्रम्*, जयपुर : जगदीश संस्कृत पुस्तकालय।

श्रेयोऽङ्काः - 4
होराः - 60

## SEC 27: गृहवास्तुपरिचयः

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयसंस्कृतौ वास्तुशास्त्रस्य महत्त्वबोधनम्।
2. वास्तुशास्त्रदिशा भारतीयज्ञानपरम्परायाः वैशिष्ट्योद्बोधनम्।
3. वास्तुशास्त्रदिशा गृहनिर्माणवैशिष्ट्यस्य बोधनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. वास्तुशास्त्रस्य परिचयं प्राप्स्यन्ति।
2. भूपरीक्षण-भूमिलक्षणादिविषयम् अवगमिष्यन्ति।
3. गृहनिर्माणे वास्तुशास्त्रस्य आवश्यकतां ज्ञास्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| SEC 27 | गृहवास्तुपरिचयः | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. वास्तुशास्त्रस्य परिचयः।**

- वास्तुशास्त्रस्य परिचयः।
- वास्तुपुरुषस्य उत्पत्तिः स्वरूपञ्च।

**अन्वितिः २. वास्तुभेदाः वास्तुशास्त्रप्रवर्तकाः च।**

- दिग्ज्ञानं, दिशां पतयः, वास्तुभेदाश्च।
- वास्तुशास्त्रस्य प्रवर्तकाः प्रमुखाचार्याः ग्रन्थाश्च।

**अन्वितिः ३. भूपरीक्षाविधयः।**

- भूपरीक्षाविधयः।
- गृहारम्भविधिः।
- ग्रामवासचक्रम्।
- काकिणीविचारः।
- ग्रामवासफलम्।

**अन्वितिः ४. भूमेः दिक्प्लवत्वं भूमिज्ञानञ्च।**

- अष्टोत्तरीया दिग्दशा।
- भूमिलक्षणानि।
- भूमिप्लवनादिफलं, प्रशस्ता भूमिश्च।
- भूमिदोषाः, गृहसमीपेशुभाशुभवृक्षाश्च।
- गजपृष्ठभूमिः, कूर्मपृष्ठभूमिः, दैत्यपृष्ठभूमिः, नागपृष्ठभूमिलक्षणं च।
- वासयोग्यभूमिः, जागृतादिभूमिज्ञानं, भूमिसंशोधनप्रकारश्च।
- भित्तिविचारः, गृहनिर्माणार्थम् इष्टिकाविचारश्च।
- इष्टिकाचक्रं, भूमिपूजाविधिः, शिलान्यासविधिः च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. दैवज्ञ, जीवनाथ, (1993), *वास्तुरत्नावली*, वाराणसी : चौखम्बा अमरभारती प्रकाशन।
2. त्रिपाठी, ब्रह्मानन्द (डॉ.), एवं शर्मा, रवि (डॉ.), (2018), *बृहद्वास्तुमाला*, वाराणसी : चौखम्बा सुरभारती प्रकाशन।
3. कात्यायन, अभय (महर्षि), (2019), *विश्वकर्मप्रकाशः*, वाराणसी : चौखम्बा सुरभारती प्रकाशन।
4. द्विवेदी, विन्ध्येश्वरी प्रसाद, (2020), *वास्तुरत्नाकरः*, वाराणसी : चौखम्बा संस्कृत सीरीज आफिस।
5. टोडरमल्ल, श्री, एवं शुक्ल, आचार्यकमलाकान्त (संपा.), *वास्तुसौख्यम्*, वाराणसी : संपूर्णानन्द संस्कृत विश्वविद्यालय।


**सहायकाः ग्रन्थाः (Additional Readings)**


1. श्रीमद्रामदैवज्ञविरचितः, सम्पा. डॉ. रामचन्द्र पाठकः, *मुहूर्तचिन्तामणिः*, वाराणसी : चौखम्बा संस्कृत संस्थान।

श्रेयोऽङ्का: - 4
होरा: - 60

## SEC 28: यज्ञविद्या

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयज्ञानपरम्परायां यज्ञानां महत्त्वबोधनम्।
2. विश्वे वैदिकसम्प्रदायस्य प्रभावबोधनम्।
3. जीवने यज्ञविद्यायाः प्रभावस्य बोधनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. यज्ञशालादीनां निर्माणविषयं ज्ञास्यन्ति।
2. अग्निस्थापन-कुशकण्डिकादीनां ज्ञानमर्जयिष्यन्ति।
3. रुद्रचण्डीहवनादीनां ज्ञानमर्जयिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| SEC 28 | यज्ञविद्या | 01 | 0 | 01 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. यज्ञशाला-यज्ञकुण्डादिनिर्माणञ्च।**

- यज्ञशालानिर्माणम्।
- स्थण्डिलनिर्माणम्।
- यज्ञकुण्डनिर्माणम्।
- यज्ञपात्रसङ्कलनम्।

**अन्वितिः २. अग्निस्थापनं, कुशकण्डिका च।**

- पञ्चभूसंस्कारः।
- स्थालीपाकप्रयोगः।
- हविर्द्रव्यनिर्माणम्।
- समित्-चयनम्।
- पूर्वोत्तराङ्गपूजनम्।

**अन्वितिः ३. शान्तिहोमः।**

- वास्तुशान्तिहोमः।
- नवग्रहशान्तिहोमः।
- नक्षत्रशान्तिहोमः जननशान्तिहोमः च।
- विनायकशान्तिहोमः।

**अन्वितिः ४. चन्डीहवनं, रुद्रहवनञ्च।**

- सप्तशतीहवनम्।
- नवार्णमन्त्रहवनम्।
- श्रीसूक्तहवनम्।
- दुर्गासूक्तहवनम्।
- रुद्रहोमः।
- मृत्युञ्जयहवनम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. शास्त्री, पं. यज्ञदत्त दुर्गाशंकर, (1972), *बृहद् ब्रह्मकर्मनित्यसमुच्चय*, मुंबई : बालुकेश्वर संस्कृत पाठशाला।
2. जोषी, पं. जिज्ञेश वाय, (2023), *विप्रपुत्रपथ*, गुजरात : वेदभवन, डाकोर, नडियाद।
3. शर्मा, प्रो. रमेशचन्द्र दाश, *यजुर्विधानसूत्रम्*, नई दिल्ली : मान्यताप्रकाशनम्।
4. दीक्षित, श्रीमद् विठ्ठल (महर्षि अभय कात्यायन), *मण्डपकुण्डसिद्धिः*, वाराणसी : चौखम्बा सुरभारती प्रकाशन।

| श्रेयोऽङ्काः - 4 |
| --- |
| होराः - 60 |

## SEC 29: वेद-शास्त्र-पुराणप्रवचनम्

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयविद्यासु पुराणानां महत्त्वबोधनम्।
2. शास्त्रीयरीत्या प्रवचनकलायाः संवर्धनम्।
3. विविधोपपुराण-कथानकानां बोधनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. पुराणानां महत्त्वं ज्ञास्यन्ति।
2. रामायणमहाभारतादीनां प्रवचनकौशलम् अधिगमिष्यन्ति।
3. वैदिकपुराणकथावाचने अभ्यासं प्राप्स्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
| --- | --- | --- | --- | --- | --- |
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| SEC 29 | वेद-शास्त्र-पुराणप्रवचनम् | 01 | 0 | 01 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. वेदशास्त्राणां संक्षिप्तपरिचयः वर्ण्यविषयाश्च।**

- वेदानां परिभाषा, वेदशब्दस्य धात्वर्थविचाराश्च।
- वेदानां महत्वं, प्रयोजनञ्च।
- वेदशाखाविचारः, वेदपरिचयः वर्गीकरणञ्च (संहिता, ब्राह्मणम्, आरण्यकम्, उपनिषत्)

**अन्वितिः २. अष्टादशपुराणानां परिचयः वर्ण्यविषयाश्च।**

- पुराणानाम् आविर्भावः।
- अष्टादशपुराणानां परिचयः।
- पुराणमहत्वम्।

**अन्वितिः ३. श्रीमद्वाल्मीकिरामायणस्य महाभारतस्य च परिचयः।**

- श्रीमद्वाल्मीकिरामायणस्य परिचयः।
- महाभारतस्य अष्टादशपर्वणां परिचयः।

**अन्वितिः ४. भाषादक्षता आख्यानानि प्रवचनकौशलाभिवृद्धिः च।**

- संस्कृतभाषा (संस्कृतसम्भाषणवर्गः)
- स्थानीयभाषा (भाषाशुद्धीकरणम्)
- शब्दरूपाणि (पुल्लिङ्ग-स्त्रीलिङ्ग-नपुंसकलिङ्गशब्दाः)
- धातुरूपाणि (भू, पठ्, लिख्, गमादि धातूनां दशसु लकारेषु अभ्यासः)
- संज्ञा-सर्वनाम-क्रिया-विशेषण-अव्यय-काल (लकार)-लिङ्ग-विभक्ति-वचन-सन्धि-समास-कारकादीनां परिचयः।
- वैदिकाख्यानानि, पौराणिकाख्यानानि च।
- प्रवचननिमित्तं शारीरिक-मानसिकसज्जता (वेशभूषा, भावभङ्गिमादयः)
- भागवतमाहात्म्यं, भक्तेः कष्टनिवृत्तिश्च।
- गोकर्णोपाख्यानं, धुन्धुकारिणः मुक्तिश्च।
- संक्षेपरामायणं, भगवद्गीता च।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. महर्षि सान्दीपनि राष्ट्रीय वेद विद्या प्रतिष्ठान, (2023), *वेदकल्पतरु*, नई दिल्ली : राष्ट्रीय पुस्तक न्यास।
2. त्रिपाठी, प्रो. कृष्णमणि, *पुराणपर्यालोचनम्*, नाग पब्लिशर्स।
3. *रामायणम् - पदविभागसहितम्*, गोरखपुर : गीताप्रेस्।
4. श्रीविजयध्वजविलिखिता, *पदरत्नावली*, गोरखपुर : गीताप्रेस्।
5. श्रीधरस्वामि, *भावार्थदीपिकासमन्वितं श्रीमद्भागवतम्*, गोरखपुर : गीताप्रेस्।
6. *सामान्य संस्कृत सम्भाषण*, बंगळूरु : संस्कृतभारती।
7. नौटियाल, चक्रधर, *अनुवादचन्द्रिका*, दिल्ली : मितिलाल प्रकाशन।
8. *वेदाङ्क*, गोरखपुर : गीताप्रेस्।

Credits - 2
Hours - 30

## SEC 30: Temple management

**Course Objectives:**

1. To understand the characteristics of temples in the Indian knowledge Systems.
2. To review the management of temples in the Vedic manner.
3. To study the ancient management skills.

**Learning Outcomes:**

After the completion of the course the students will:

1. Learn the importance of temples.
2. Learn about the various types of temples.
3. Gain the knowledge about the various equipment used in the temples.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| SEC 30 | Temple management | 02 | 0 | 0 | 02 |

**Details of Course**

**Unit I General introduction of Temple.**

- What is a Temple? Why are Temples needed?
- Importance of Temples, Types of Temples, History of Temples.
- Need of Temple Management.

**Unit II Temple building styles in India.**

- North Indian style Temples.
- South Indian Style Temples.
- Mixed (Vesar) style Temples.
- Method of making Idols.

**Unit III Various arrangements in the Temple.**

- Water arrangement.
- Cleanliness.
- Material arrangement.
- Fruit and Flower arrangement.
- Prasad arrangement.
- Preparation of Bhog for God etc.

**Unit IV General introduction of Panchang.**

- Introduction of Panchang.
- Knowledge of Tithi, Vaar, Nakshatra, Yog, Karan etc.

**Essential/Recommended Readings/Texts:**


1. Rao, C. N. *Administration of Temples*. Tirupati: Tirumala Tirupati Devasthanam.
2. शास्त्री दुर्गाशंकर, *ब्राह्मणित्यकर्मसमुच्चय*, मुम्बई: शास्त्री दुर्गाशंकर लाइब्रेरी।
3. *नित्यकर्मसमुच्चय*, गोरखपुर: गीता प्रेस।
4. *कर्मकाण्डप्रदीप*, वाराणसी: चौखम्बा विद्या भवन।

5. शास्त्री दुर्गाशंकर, *बालबोधज्योतिषसारसमुच्चय*, मुम्बई: शास्त्री दुर्गाशंकर लाइब्रेरी।
6. *मुहूर्तचिन्तामणि*, वाराणसी: चौखम्बा विद्या भवन।
7. Vajpayee, Krishnadutt. *History of Indian Architecture*. Lucknow: Uttar Pradesh Hindi Institute.

Credits - 2
Hours - 30

## SEC 31: Yoga: Philosophy and Practice

**Course Objectives:**

1. To learn the fundamentals of Yoga for harmonizing the body, mind and emotions.
2. To demonstrate the value and the practice of holistic living.
3. To value the heritage of Yoga for self and society.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Understand ways to harmonize the body and mind through Yoga.
2. Control the mind through practicing Yoga.
3. Understand the consciousness through practical training.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| SEC 31 | Yoga: Philosophy and Practice | 01 | 0 | 01 | 02 |

**Details of Course:**

**Unit I Yoga: Asana, Prāṇāyāma and Dhyana.** **Credit 1**

- History of Yoga.
- Significance of Asana.
- Effect of Pranayama.
- Importance of Dhyana.

**Unit II Patanjali's Yogasūtra and Chakra.** **Credit 1**

- Patanjali's Yogasūtra: a summary
- First sutra
- Second sutra
- Chakras (Psychic centers)

**Unit III Understanding Asana and Pranayama.** **Credit 1**

- Asana: the basics
- Surya Namaskara
- Nadishodhana Pranayama

**Unit IV Practical component.** **Credit 1**

- Surya Namaskar
- Selected Asana
- Pranayama
- Relaxation exercises for the eyes (7 steps) neck (4 steps)
- Concentration on Bhrumadhya
- Project Work (effect of everyday concentration on breath for 15 minutes: reflections to be compiled in the form of a Project report.
- Any other Practical/Practice as decided from time to time

**Essential/Recommended Readings/Texts:**

1. Saraswati, Swami Satyananda. (2004). *Āsanas, prāṇāyāma and mudra bandh*. Yoga Publications Trust, Munger, Bihar, India.
2. Vivekananda, S. (2021). *Patanjali yogasutras: Commentary by Swami Vivekananda (Rajyoga)*. Shrishti Publishers and Distributors, Delhi.

**Additional Readings:**

1. Saraswati, Swami Omanand (2013). *Patanjal yog pradeep*. Gita Press, Gorakhpur.
2. Sivananda, Swami (2019). *Science of pranayama* (Ed. D. De Angelis).
3. Shastri, Udayveer. *Patanjal–yoga darshanam* (Udayveer Shastri Granthavali, Vol. 4). Govindram Hasanand, Delhi.

# POOL OF VALUE-ADDED COURSES

**Credits - 2**
**Hours - 30**

## VAC 1: Indian Moral Values

**Course Objectives:**

1. To introduce students to the moral and ethical frameworks rooted in Indian tradition using Sanskrit sources.
2. To explore timeless values like Dharma, Satya, Ahimsa, Seva and self-discipline through classical literature.
3. To cultivate character and ethical reasoning based on Sanskrit verses and stories.
4. To relate ancient Indian ethical thought to modern-day individual and societal challenges.

**Learning Outcomes:**

After completion of the course, the students will:

1. Describe key ethical concepts from Indian philosophical systems and scriptures.
2. Interpret moral dilemmas using Indian value-based approaches.
3. Apply ethical teachings of Indian traditions to contemporary issues.
4. Demonstrate personal and social responsibility based on Indian value systems.
5. Reflect on one's own actions in light of dharma, compassion and self-discipline.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 1 | Indian Moral Values | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Foundations of Indian Ethical Thought.**

- Definitions: Dharma (धर्मः), Nīti (नीतिः) and Śīla (शीलम्)
- Sources of ethics: Vedas, Upaniṣads, Smṛtis, Itihāsa, Purāṇas.
- Four aims of life: Dharma, Artha, Kāma, Mokṣa (Purushārthas)
- Panchakośa model of holistic human development.

**Suggested Texts & Verses**:

- Taittirīya Upaniṣad – Śikṣāvallī (śānta mantra, sāttvik development).
- Manusmṛti (6.92 - 6.96) qualities of a dhārmika life.

**Unit II Values from the Bhagavad Gītā.**

- Svadharma and karma-yoga (duty and selfless action)
- Sthitaprajña (ethical composure and inner strength)
- Three guṇas and moral decision-making (sattva, rajas, tamas)
- Renunciation and inner detachment (tyāga and vairāgya)

**Verses for Study**:

- Bhagavad Gītā 2,3,4 & 18th Chapters.

**Unit III Ethical Teachings in Nītiśāstra.**

- Pancatantra and Hitopadeśa: stories with moral lessons (Four Brahamnas)
- Chanakya Nīti: personal discipline, leadership ethics, statecraft.
- Vidura Nīti (Mahābhārata): qualities of wise and virtuous people.

**Suggested Texts**

- Hitopadeśa – Suhṛd-bheda, Mitra-lābha.
- Chanakya Nīti – Selected shlokas on conduct and self-control.
- Mahābhārata, Udyoga Parva – Vidura Nīti excerpts.

**Unit IV Values in Daily Life and Social Harmony.**

- Respect to parents, teachers, elders (mātṛ-devo bhava, etc.)
- Ahimsa (non-violence), satya (truth), dayā (compassion), śauca (cleanliness)
- Duties towards society (seva), family (gṛhastha dharma) and nature (ṛta)
- Role of self-discipline (yama-niyama in Yoga Sutras)

**Suggested Texts:**

- Taittirīya Upaniṣad – Parental and teacher reverence.
- Yoga Sūtras of Patañjali – Yama & Niyama (2.30–2.32)
- Manusmṛti 1.108-112 Universal duties.

**Unit V Universal Ethical Principles in Sanskrit Literature.**

- Satyaṁ vad, dharmaṁ cara – speak the truth, act rightly (Shlokas on Importance of Satya & Dharma)
- Vasudhaiva Kutumbakam – world is one family.
- Lokasaṅgraha – (Shlokas on collective well-being)
- Relevance of Sanskrit ethical principles in modern global challenges: sustainability, peace, human dignity.

**Suggested Texts:**

- Mahā Upaniṣad 6.72 - वसुधैवकुटुम्बकम्
- Bhagavad Gītā 3.20 - लोकसंग्रहः
- Rigveda - Sam Gachhadhvam mantra (10.191.2)

**Suggested Readings and Resource:**

1. Bhagavad Gītā (with Sanskrit-English commentary)
2. Chanakya Nīti Śāstra – G.N. Sharma
3. Hitopadeśa – G.L. Tikekar (Sanskrit-English edition)
4. Radhakrishnan, S. – Indian Philosophy
5. Satyartha Prakash – Ethical Values in Indian Philosophy

**Essential/Recommended Readings/Texts:**

1. Create a Sanskrit value calendar/poster with daily ślokas.
2. Group dramatization of Panchatantra moral tales.
3. Write a reflective essay on how Sanskrit-based values can address contemporary issues like climate change.

**Online Resources:**

- https://sanskritdocuments.org
- https://indianculture.gov.in
- https://iks.iitgn.ac.in
- https://bharatiyavidya.indicacademy.org

Credits - 2
Hours - 30

## Sanskrit Version

### VAC 1: भारतीयनैतिकमूल्यानि

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. संस्कृतस्रोतसाम् उपयोगेन भारतीयपरम्परायां निहितानां नैतिकसंरचनानां विषये छात्रेभ्यः परिचयप्रदानम्।
2. संस्कृतसाहित्यद्वारा धर्म-सत्य-अहिंसा-सेवा-आत्मानुशासनादीनां कालातीतमूल्यानाम् अन्वेषणम्।
3. संस्कृतपद्यकथाधारेण चरित्र-नैतिकतर्कयोः संवर्धनम्।
4. प्राचीनभारतीयनैतिकचिन्तनस्य अद्यतनकालिक्या व्यक्तिगतसामाजिकोपहुत्या सह सम्बन्धस्थापनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. भारतीयदार्शनिकप्रणालीभ्यः शास्त्रेभ्यश्च प्रमुखनैतिकसंकल्पनानां ज्ञानं प्राप्स्यन्ति।
2. भारतीयमूल्याधारितदृष्टिकोणानाम् उपयोगेन नैतिकसन्दोहस्य विश्लेषणं कर्तुं शक्ष्यन्ति।
3. भारतीयपरम्परायां वर्णितायाः नैतिकशिक्षायाः समकालीनविषयेषु समुपयोगं कर्तुं प्रभविष्यन्ति।
4. भारतीयमूल्यव्यवस्था-आधारितस्य व्यक्तिगत-सामाजिक-उत्तरदायित्वस्य निर्वहणं कर्तुं शक्ष्यन्ति।
5. धर्म-करुणा-आत्मानुशासनानाम् आलोके स्वस्य कर्मविषये चिन्तनं करिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् ((Credit Distribution of the Course)) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| VAC 1 | भारतीयनैतिकमूल्यानि | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. भारतीयनैतिकचिन्तनस्य आधाराः।**

- परिभाषाः - धर्मः, नीतिः शीलञ्च।
- नीतीनां स्रोतांसि - वेदाः, उपनिषदः, स्मृतयः, इतिहासाः, पुराणानि च।
- जीवनस्य चत्वारः पुरुषार्थाः - धर्मः, अर्थः, कामः, मोक्षश्च।
- समग्रमानवविकासस्य पञ्चकोशप्रतिरूपम्। (PanchakoŚa model of holistic human development)

**सहायकाः ग्रन्थाः-**

- तैत्तिरीयोपनिषत् – शिक्षावल्ली (शान्तिमन्त्रः, सात्विकविकासः)
- मनुस्मृतिः 6.92-96 धार्मिकजीवनस्य गुणाः।

**अन्वितिः २. भगवद्गीतायां मूल्यानि।**

- स्वधर्मः कर्मयोगश्च (कर्त्तव्यमथ च निःस्वार्थं कर्म)
- स्थितप्रज्ञसम्प्रत्ययः (नैतिकसंयमः आन्तरिकं बलञ्च)
- सत्त्वं रजस्तमश्चेति त्रयः गुणाः, नैतिकनिर्णयश्च।
- त्यागः आन्तरिकवैराग्यञ्च।

**अध्ययनार्थं श्लोकाः :-**

- ○ भगवद्गीतायाः द्वितीयतृतीयचतुर्थाष्टादशाध्यायानां श्लोकाः।

**अन्वितिः ३. नीतिशास्त्रे नैतिकशिक्षा।**

- पंचतन्त्रं हितोपदेशश्च : नैतिकपाठ्ययुक्ता कथा (चत्वारः ब्राह्मणाः)
- चाणक्यनीतिः व्यक्तिगत-अनुशासनम्, नेतृत्वनैतिकता, शासनकला चेति।
- विदुरनीतिः (महाभारतम्) : ज्ञानी-सद्गुणिनोः गुणाः।

**सहायकाः ग्रन्थाः-**

- ○ हितोपदेशः – सुहृद्भेदः, मित्रलाभश्च।
- ○ चाणक्यनीतिः – आचरण-आत्मसंयमसम्बद्धाः चितश्लोकाः।
- ○ महाभारतम्, उद्योगपर्वः – विदुरनीतेः अंशः।

**अन्वितिः ४. दैनन्दिनजीवने सामाजिकसौहार्दं मूल्यानि च।**

- मातृ-पितृ-गुरु-वृद्धादीनां सम्माननम् (मातृदेवो भव)
- अहिंसा (हिंसायाः अभावः), सत्यम्, दया, शुद्धता चेति।
- समाज-परिवार-प्रकृतीत्यादीनां कृते मनुष्याणां कर्त्तव्यानि।
- आत्मानुशासनस्य भूमिका (यमनियमयोः सूत्राणि)

**सहायकाः ग्रन्थाः**

- ○ तैत्तिरीयोपनिषद् – माता-पितृ-गुरुणां प्रति श्रद्धाभावः।
- ○ पातञ्जलयोगसूत्रम् – यमनियमयोः सूत्राणि (2.30–2.32)
- ○ मनुस्मृतिः 1.108-112 सार्वत्रिककर्त्तव्यानि।

**अन्वितिः ५. संस्कृतसाहित्ये सार्वभौमिकनैतिकसिद्धान्ताः।**

- सत्यं वद, धर्मं चर। (सत्यधर्ममहत्त्वपरकश्लोकाः)
- वसुधैव कुटुम्बकम्।
- लोकसंग्रहः – (सामूहिककल्याणपरकाः श्लोकाः)

- आधुनिकवैश्विकोपहूतिषु संस्कृतनैतिकसिद्धान्तानां प्रासंगिकता : नैरन्तर्यं, शान्तिः, मानवगौरवश्च।

**सहायकाः ग्रन्थाः -**

- महोपनिषत् 6.72 – वसुधैव कुटुम्बकम्।
- भगवद्गीता 3.20 – लोकसंग्रहः।
- ऋग्वेदः – "सं गच्छध्वम्" इति मन्त्रः (10.191.2)

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. भगवद्गीता, गीताप्रेस, गोरखपुर, उ.प्र.।
2. चाणक्यनीतिशास्त्रम् – G.N. शर्मा, चौखम्बा सुरभारती प्रकाशन, वाराणसी।
3. हितोपदेशः, चौखम्बा सुरभारती प्रकाशन, वाराणसी।
4. राधाकृष्णन, स० – भारतीयदर्शनम्।
5. श्रीमद्दयानन्दसरस्वती-स्वामिविरचितः सत्यार्थप्रकाशः, भारतीयदर्शने नैतिकमूल्यम्, आर्ष साहित्य प्रचार ट्रस्ट, ४५५, खारी बावली, दिल्ली-६।

**प्रस्ताविताः परियोजनाः (Project Suggestions)**

1. दैनिकोपयोगिश्लोकैः सह संस्कृतमूल्यपञ्चाङ्ग-चित्ररचना।
2. पंचतन्त्रस्य नैतिककथानां सामूहिकरूपेण नाटकप्रस्तुतिः। (चत्वारः ब्राह्मणाः)
3. संस्कृताधारितमूल्यानि जलवायुपरिवर्तनमित्यादि-समकालीनसमस्याः निराकर्तुं कथं शक्नुवन्ति इति विषये चिन्तनात्मकं निबन्धं लिखत।

Credits - 2
Hours - 30

## VAC 2: Indian Knowledge Systems and Value-Based Education

**Course Objectives:**

1. To introduce students to the holistic and interdisciplinary nature of Indian Knowledge Systems (IKS).
2. To promote a value-based worldview drawn from authentic Indian sources.
3. To inspire self-awareness, ethical reasoning and social responsibility through classical wisdom.
4. To connect timeless values of dharma, seva and ecological harmony with contemporary global challenges.

**Learning Outcomes:**

After completion of the course, the students will:

1. Identify major branches and contributions of Indian Knowledge Systems.
2. Explain foundational Indian values rooted in Sanskrit texts and Itihāsa.
3. Apply principles of dharma, seva and śraddhā to modern ethical situations.
4. Analyze the interconnectedness of education, sustainability and social values.
5. Reflect on one's personal and academic life using Indian value frameworks.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 2 | Indian Knowledge Systems and Value-Based Education | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Indian Knowledge Systems (IKS)**

- Overview: Veda, Vedāṅga, Darśana, Itihāsa, Purāṇa, Śilpaśāstra, Āyurveda, Arthashastra.
- Characteristics of IKS; holistic, integrated, spiritual, ecological.
- Transmission through oral traditions, gurukula, śāstra, paramparā.
- India's contributions in science, education and sustainability.

**Unit II Foundations of Value-Based Education in India.**

- Goals of education: Self-knowledge, Self-restraint, Liberation.
- Panchakośa and holistic development (physical to blissful sheath)
- Satyam, Ahimsā, Tapas, Daya, Śauca as core educational values.
- Role of Śraddhā (faith), Guru (Teacher) and Vidyā (Knowledge) in study.

**Suggested Texts:**

- Taittirīya Upaniṣad – Śikṣāvallī (Matṛ-devo bhava, etc.)
- Bhagavad Gītā 4.34 (Guru-disciple relation)
- Yoga Sūtra 2.30-2.32 – Yamas and Niyamas
- Taittiriya Upanishad, Brahmānandavallī

**Verses to study:**

- Verses from the second, third, fourth and eighteenth chapters of the Bhagavad Gita.

**Unit III Dharma and Ethics in IKS.**

- Concept of dharma: individual, social and universal order.
- Purushārthas (Dharma, Artha, Kāma, Mokṣa) as value framework.
- Nīti, śīla and kartavya in daily life.
- Ethics from Itihāsa: Rāma (Truth), Kṛṣṇa (Action), Vidura (Wisdom)

**Suggested Texts**:

- Manusmṛti 6.92–96 (dharma qualities)
- Mahābhārata – Vidura Nīti.
- Rāmāyaṇa – Ayodhyā Kāṇḍa excerpts.
- Bhagavad Gita- 3rd Chapter.

**Unit IV Indian Values for Social and Environmental Harmony.**

- Vasudhaiva Kutumbakam – Global family.
- Community-centered values: Seva, Dāna, Yajna.
- Harmony with animals, plants and rivers in Indian culture.

**Suggested Texts:**

- Mahā Upaniṣad 6.72 – Vasudhaiva Kutumbakam.
- Atharvaveda – Earth as mother (Bhūmi Sūkta)
- Bhagavad Gītā 3.10–3.16 – Yajña and harmony.

**Unit V Education for Self-Development and Social Leadership.**

- Self-regulation and self-reflection (Svadhyāya and Tapaḥ)
- Leadership through character and detachment.
- Role of Indian values in character-building, creativity and innovation.
- Indian models of leadership: Chanakya, Buddha, Vivekananda.

**Suggested Texts:**

- Bhagavad Gītā 6.5 – Uplifting the self.
- Chanakya Nīti – Leadership and discipline.
- Yoga Sūtras – Inner mastery.

**Project Suggestions:**

1. Sanskrit value calendar with daily useful verses.
2. Dramatic presentation of the moral stories of the Panchatantra as a collective. (Four Brahmins)
3. Write a reflective essay on how culture-based values can solve contemporary problems such as climate change.

**Essential/Recommended Readings/Texts:**

1. Bhagavad Gītā – Swami Chinmayananda
2. Taittirīya Upaniṣad – English-Sanskrit translation by S. Radhakrishnan
3. Yoga Sūtras of Patañjali – Swami Vivekananda

4. Mahābhārata (Vidura Nīti – Udyoga Parva excerpts)
5. Chanakya Niti

**Additional Readings:**

1. Subhash Kak – The Nature of Knowledge in Ancient India
2. IGNCA – Indian Knowledge Systems Resource Series
3. Ministry of Education – IKS Curriculum Framework
4. Satyartha Prakash – Indian Ethics and Moral Philosophy

**Online Resources:**

- https://sanskritdocuments.org
- https://indianculture.gov.in
- https://iks.iitgn.ac.in
- https://bharatiyavidya.indicacademy.org

Credits - 2
Hours - 30

Sanskrit Version

## VAC 2: भारतीयज्ञानपरम्परा मूल्याधारितशिक्षा च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयज्ञानपरम्परायाः (IKS) प्रकृतेः अन्तश्शास्त्रीयप्रकृतेश्च परिचयः।
2. प्रामाणिकभारतीयस्रोतोभ्यः स्वीकृत-मूल्याधारितविश्वदृष्टेः प्रवर्धनम्।
3. शास्त्रीयबुद्ध्या आत्मजागरूकता-नैतिकतर्क-सामाजिकदायित्वादीनाञ्च प्रेरणम्।
4. धर्म-सेवा-पारिस्थितिकसौहार्दादि-कालातीतमूल्यैः सह समकालीनवैश्विकोपहूतीनां समाधानम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. भारतीयज्ञानपरम्परायाः प्रमुखशाखानां तद्योगदानस्य च परिचयं प्राप्स्यन्ति।
2. संस्कृतग्रन्थेषु इतिहासेषु च मूलभूतानाम् आधारभूतभारतीयमूल्यानाम् अर्थं ज्ञास्यन्ति।
3. आधुनिकनैतिकपरिस्थितौ धर्मसेवाश्रद्धादिसिद्धान्तानाम् अनुप्रयोगं कर्तुं शक्ष्यन्ति।
4. शिक्षायाः, नैरन्तर्यस्य, सामाजिकमूल्यानां च परस्परसम्बद्धतायाः विश्लेषणं कर्तुं शक्ष्यन्ति।
5. भारतीयमूल्यरूपरेखायाः उपयोगेन व्यक्तिगत-शैक्षणिकजीवनयोः प्रतिबिम्बम् आनेतुं शक्ष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| VAC 2 | भारतीयज्ञानपरम्परा मूल्याधारितशिक्षा च | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. भारतीयज्ञानपरम्परायाः परिचयः।**

- वेद-वेदाङ्ग-दर्शन-इतिहास-पुराण-शिल्पशास्त्र-आयुर्वेद-अर्थशास्त्राणां परिचयः।
- भारतीयज्ञानपरम्परायाः समग्रता, एकीकरणम्, आध्यात्मिकता, पारिस्थितिकी चेति। (Characteristics of IKS; Holistic, Integrated, Spiritual, Ecological)
- श्रुतिपरम्पराद्वारा ज्ञानस्य संचारः, गुरुकुलं, शास्त्रं परम्परा चेति।
- विज्ञानशिक्षानैरन्तर्येषु च भारतस्य योगदानम्। (India's contributions in science, education, sustainability)

**अन्वितिः २. भारते मूल्याधारितशिक्षायाः आधाराः।**

- शिक्षायाः लक्ष्यम् : आत्मज्ञानम्, आत्मसंयमः, मुक्तिश्च।
- पञ्चकोशः समग्रविकासश्च।

- प्रमुखशैक्षिकमूल्यत्वेन सत्यम्, अहिंसा, तपः, दया, शौचः इति मूल्यानि।
- अध्ययने श्रद्धा-गुरु-ज्ञानानां भूमिका।

**सहायकाः ग्रन्थाः -**

- ○ तैत्तिरीय-उपनिषद् – शिक्षावल्ली (मातृदेवो भव इत्यादयः)
- ○ भगवद्गीता 4.34 (गुरु-शिष्यसम्बन्धः)
- ○ यमाः नियमाश्च (योगसूत्रम् – 2.30–2.32)
- ○ तैत्तिरीयोपनिषत्, ब्रह्मानन्दवल्ली

**अध्ययनार्थं श्लोकाः :**

- ○ भगवद्गीतायाः द्वितीयतृतीयचतुर्थाष्टादशाध्यायानां श्लोकाः।

**अन्वितिः ३. भारतीयज्ञानपरम्परायां धर्मः नैतिकता च।**

- धर्मस्य अवधारणा : व्यक्तिगत-सामाजिक-सार्वभौमिकक्रमश्च।
- मूल्यरूपेण पुरुषार्थाः (धर्मः, अर्थः, कामः, मोक्षश्च)
- जीवनस्य नित्यकर्माणि- नीतिः, शीलं, कर्त्तव्यञ्च।
- ऐतिहासिककथाभ्यः नीतिः- रामः (सत्यम्), कृष्णः (कर्म), विदुरः (प्रज्ञा)

**सहायकाः ग्रन्थाः -**

- ○ मनुस्मृतिः 6.92-96 (धर्मगुणाः)
- ○ महाभारतम् – विदुरनीतिः
- ○ रामायणम् – अयोध्याकाण्डः
- ○ भगवद्गीतातृतीयोऽध्यायः

**अन्वितिः ४. सामाजिकपर्यावरणसौहार्दस्य भारतीयमूल्यानि।**

- वसुधैव कुटुम्बकम्।
- समुदायकेन्द्रितमूल्यं, सेवा, दानं, यज्ञश्च।
- भारतीयसंस्कृतौ पशुभिः, वनस्पतिभिः, नद्यैः च सह सामञ्जस्यम्।

**सहायकाः ग्रन्थाः -**

- ○ महोपनिषत् 6.72 – वसुधैव कुटुम्बकम्।
- ○ अथर्ववेदः – मातृत्वेन पृथिव्याः स्वरूपम् (भूमिसूक्तम्)
- ○ भगवद्गीता 3.10-3.16 – यज्ञः सामञ्जस्यञ्च।

**अन्वितिः ५. आत्मविकासाय सामाजिकनेतृत्वेन च शिक्षा।**

- आत्मनियमः आत्मचिन्तनञ्च (स्वाध्यायः तपश्च)
- चरित्र-माध्यमेन वैराग्यमाध्यमेन च नेतृत्वम्।

- चरित्रनिर्माणे, सर्जनशीलतायां, नवीनतायाञ्च भारतीयमूल्यानां भूमिका।
- नेतृत्वस्य भारतीय-आदर्शपुरुषाः, चाणक्यः, बुद्धः, विवेकानन्दश्च।

**सहायकाः ग्रन्थाः-**

- भगवद्गीता 6.5 – आत्मोत्थानम्
- चाणक्यनीतिः – नेतृत्वम् अनुशासनञ्च
- योगसूत्रम् – आन्तरिकनिपुणता

**प्रस्ताविताः परियोजनाः (Project Suggestions)**

1. दैनिकोपयोगिश्लोकैः सह संस्कृतमूल्यपञ्चाङ्ग-चित्ररचना।
2. पंचतन्त्रस्य नैतिककथानां सामूहिकरूपेण नाटकप्रस्तुतिः। (चत्वारः ब्राह्मणाः)
3. संस्कृताधारितमूल्यानि जलवायुपरिवर्तनमित्यादि-समकालीनसमस्याः निराकर्तुं कथं शक्नुवन्ति इति विषये चिन्तनात्मकं निबन्धं लिखत।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. भगवद्गीता, स्वामीचिन्मायानन्दः, गीताप्रेस, गोरखपुर, उ.प्र.।
2. तैत्तिरीयोपनिषत्, आङ्ग्ल-संस्कृत-अनुवादसहितः एस. राधाकृष्णन्
3. पतञ्जलि-योगसूत्रं, स्वामीविवेकानन्दः
4. महाभारतम् (विदुरनीति – उद्योगपर्वः)
5. चाणक्यनीतिः

**सहायकाः ग्रन्थाः (Additional Readings)**

1. सत्यार्थप्रकाशः, भारतीयदार्शनिकनैतिकसिद्धान्ताः।
2. Subhash Kak, The Nature of Knowledge in Ancient India
3. IGNCA, Indian Knowledge Systems Resource Series
4. Ministry of Education, IKS Curriculum Framework

**Online Resources:**

- https://sanskritdocuments.org
- https://indianculture.gov.in
- https://iks.iitgn.ac.in
- https://bharatiyavidya.indicacademy.org

श्रेयोऽङ्काः - 2
होराः - 30

## VAC 3: मूल्यवर्धने धर्मशास्त्रं नीतिशास्त्रं च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयज्ञानपरम्परायां धर्मस्य महत्त्वबोधनम्।
2. भारतीयसंस्कृतौ नीतिविषयकबोधनम्।
3. नीतिशास्त्रमाध्यमेन विविधविषयाणां बोधनम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. धर्मशब्दस्य अर्थं, धर्मशास्त्रस्य इतिहासं, परम्परां च ज्ञास्यन्ति।
2. सृष्टिविषयकतत्त्वं धर्मशास्त्रमाध्यमेन ज्ञास्यन्ति।
3. नीतिशास्त्रस्येतिहासं परम्परां च ज्ञास्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| VAC 3 | मूल्यवर्धने धर्मशास्त्रं नीतिशास्त्रं च | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. धर्मशास्त्रस्य इतिहासः।**

- धर्मशब्दस्यार्थः, धर्मशास्त्रस्येतिहासः, धर्मशास्त्रस्य ग्रन्थपरम्परा च।

**अन्वितिः २. मनुस्मृतौ सृष्ट्यादिविषयवर्णनम्।**

- मनुस्मृतौ प्रथमाध्यायस्य सृष्ट्यादिविषयवर्णनस्य व्याख्यासहितमध्ययनम्।

**अन्वितिः ३. नीतिशास्त्रस्य परिचयः।**

- नीतिशास्त्रस्य परिचयः, नीतिशास्त्रस्येतिहासः, नीतिशास्त्रस्य ग्रन्थपरम्परा।

**अन्वितिः ४. विदुरनीतौ सृष्ट्यादिविषयवर्णनम्।**

- विदुरनीतिप्रथमाध्यायस्य सृष्ट्यादिविषयवर्णनस्य व्याख्यासहितमध्ययनम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. भारतरत्न महामहोपाध्याय डॉ. पाण्डुरङ्गवामनकाणे, *धर्मशास्त्र का इतिहास*, लखनऊ : उत्तरप्रदेशहिन्दीसंस्थानम्।
2. *विदुरनीति*, सोनीपत : रामलालकपूर ट्रस्ट।
3. सं. नारायणरामाचार्यः, *मनुस्मृतिः (मन्वर्थमुक्तावलीसहिता)*, मुम्बई : निर्णयसागरमुद्रणालयः।

श्रेयोऽङ्काः - 2
होराः - 30

## VAC 4: रामायणमहाभारतयोः आदर्शमूल्यानि

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतस्य आदिकाव्यविषये बोधनम्।
2. रामायणस्य पात्रपरिचयबोधनम्।
3. महाभारतस्य परिचयबोधनम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. रामायणस्य विषयतत्त्वं ज्ञास्यन्ति।
2. महाभारतस्य विषयतत्त्वं ज्ञास्यन्ति।
3. रामायणमहाभारतयोः पात्रपरिचयं प्राप्स्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| VAC 4 | रामायणमहाभारतयोः आदर्शमूल्यानि | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. रामायणपरिचयः।**

- रामायणपरिचयः - रचनाकारः, रचनाकालः, महत्त्वप्रभावश्च।
- सप्तकाण्डानां विषयवस्तुनः सामान्यपरिचयः।
- बालकाण्डम् - श्रीरामजन्म, विश्वामित्रस्य यज्ञरक्षा।
- अयोध्याकाण्डम् - कैकेय्याः वरदानं, रामस्य वनगमनम्।
- अरण्यकाण्डम् - शूर्पणखाप्रसङ्गः, सीताहरणञ्च।
- सुंदरकाण्डम् - हनुमतः लङ्कागमनं, लङ्कादहनञ्च।
- युद्धकाण्डम् - रामरावणयोर्युद्धः, अयोध्याप्रत्यागमनं, सीतामातुः अग्निपरीक्षा च।
- रामायणे नैतिकता आदर्शचरित्राणाञ्च अध्ययनम्।
- रामायणपारायणं, पारायणमाहात्म्यं, विधिज्ञानञ्च।

**अन्वितिः २. महाभारतपरिचयः।**

- महाभारतपरिचयः - रचनाकारः, रचनाकालः, महत्त्वं प्रभावश्च।
- अष्टादशपर्वणां विषयवस्तुनः सामान्यपरिचयः।
- आदिपर्वणि कुरुवंशस्योत्पत्तिः, गंगा-शांतनुकथा, भीष्मप्रतिज्ञा च।
- वनपर्वणि कीचकवधः, यक्षप्रश्नाश्च।
- उद्योगपर्वणि श्रीकृष्णस्य शान्तिदूतरूपेण यात्रा।
- भीष्मपर्वणः श्रीमद्भगवद्गीतायाः प्रमुखोपदेशाः (श्रीमद्भगवद्गीतायाः समस्ताध्यायानां विषयवस्तूनां सामान्यपरिचयः)।
- शान्तिपर्वणि भीष्मोपदेशः।
- महाभारते धर्मः, राजनीतिः एवं जीवनदर्शनम्।

**अन्वितिः ३. रामायणस्य चितप्रसङ्गाः।**

- नारदद्वारा वाल्मीकिं प्रति श्रीरामचरितकथाश्रावणं, राजमन्त्रीणां गुणानां नीतिनां च वर्णनम्।
- राजादशरथेन अश्वमेधयागः पुत्रकामेष्टियागः च।
- विश्वामित्रेण सह रामलक्ष्मणयोर्गमनं, श्रीरामेण तारकावधश्च।
- श्रीरामेण धनुर्भङ्गः, स्वयंवरश्च।
- कैकेय्या वरत्रयस्य याचना, श्रीरामस्य वनगमनम्।
- भरतेन रामस्य पादुकानयनम्।
- सीताहरणं, वालिवधः, रामसेतुनिर्माणञ्च।
- मेघनादलक्ष्मणयोः युद्धः, रावणवधश्च।
- रामस्य अयोध्यागमनम्।

**अन्वितिः ४. महाभारतस्य चितप्रसङ्गाः।**

- समुद्रमन्थनम्, अमृतादीनां प्राप्तिः, जरत्कारोः कथा च।
- परीक्षितस्य मृत्युकारणं, दक्षप्रजापतिना ययातेः वंशवर्णनञ्च।
- राजकुमाराणां शिक्षा एवं परीक्षा।
- एकलव्यस्य गुरुभक्तिः।
- ब्रह्मतेजसः महिमा, विश्वामित्रस्य नन्दिन्या सह सङ्घर्षश्च।
- राजसूययज्ञप्रारम्भः, शिशुपालजन्म एवं वधश्च।

- क्षमायाः प्रशंसा।
- तीर्थयात्रायाः महिमा।
- दानस्य महिमा।
- व्यासमैत्रेयसंवादः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. वाल्मीकि, *रामायण (संस्कृत, हिन्दी अनुवाद)*, गोरखपुर : गीताप्रेस।
2. वेदव्यासः, *महाभारतम् (संस्कृत, हिन्दी अनुवाद)*।
3. *संक्षिप्त महाभारत (प्रथमखण्डः)*, गोरखपुर : गीताप्रेस।
4. *संक्षिप्त महाभारत (द्वितीयखण्डः)*, गोरखपुर : गीताप्रेस।
5. तुलसीदासः, *रामचरितमानस*, गोरखपुर : गीताप्रेस।
6. *श्रीमद्भगवद्गीता (व्याख्यासहित)*, गोरखपुर : गीताप्रेस।

Credits - 2
Hours - 30

## VAC 5: Swasthavrttam Ritucharya (Seasonal Regimens)

**Course Objectives:**

1. To introduce students to foundational principles of Swasthavṛtta (healthy conduct) from classical Ayurvedic texts.
2. To promote preventive health and lifestyle management using Indian Knowledge Systems.
3. To introduce the concept of Ṛtu (seasons) and their influence on human health and behavior.
4. To enable students to understand and apply Ṛtucaryā (seasonal regimens) as described in classical Ayurveda, especially Ashtanga Hridayam.
5. To develop appreciation for holistic wellness as practiced through Dinacharya, Ritucharya and ethical living.
6. To create awareness about aligning lifestyle and diet with seasonal changes for preventive health.

**Learning Outcomes:**

After completion of the course, the students will:

1. Describe the daily and seasonal regimens (Dinacharya & Ritucharya) from classical Ayurveda texts.
2. Identify key principles of hygiene, ethics and mental health in Swasthavṛtta.
3. Analyze the concept of Vega (natural urges) and their management.
4. Apply Swasthavṛtta concepts to promote personal and community well-being.
5. Identify the classification of seasons and their transitions according to Āyurveda.
6. Explain the detailed regimens prescribed for each Ṛtu in Ashtanga Hridayam.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 5 | Swasthavrttam Ritucharya (Seasonal Regimens) | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Introduction to Swasthavṛtta and Classical Texts.**

- Definition and scope of Swasthavṛtta.
- Importance of prevention (Nidāna-parivarjana)
- Role of Aṣṭāṅga Hṛdayam, Sūtrasthāna in maintaining wellbeing.
- Concept of Dharma, Āchāra and Sadvṛtta.
- Mind-body connection in Ayurvedic lifestyle.

**Unit II Dinacharya Adhyāya (AH Su.2)**

- Dinacharya-vihāra: Daily regimens (wake-up, brushing, Abhyanga, Vyāyāma etc.,)
- Shuddhi-niyam: Personal hygiene and cleansing routines.

- Dharmapālana evam Sadvṛtta pālana: Ethical living and conduct.

**Unit III Introduction to Ṛtucaryā and Classification of Seasons (AH Su.3)**

- Definition and significance of Ṛitu.
- Influence of Sūrya (sun), Chandra (moon) and environment on seasonal changes.
- Health, immunity (Ojas) and doshic variation across seasons.
- Uttarāyaṇa (Adāna kāla): Śiśira, Vasanta, Grīṣma.
- Dakṣiṇāyana (Visarga kāla): Varṣā, Śarada, Hemanta.
- Effects on Agni (digestive fire), Vāta, Pitta and Kapha.

**Unit IV Detailed Seasonal Regimens (Ṛtucaryā) (AH Su.3)**

- Diet (Āhāra), behavior (Vihāra), clothing and routines for:
  - Śiśira (late winter)
  - Vasanta (spring)
  - Grīṣma (summer)
  - Varṣā (monsoon)
  - Śarada (autumn)
  - Hemanta (early winter)
- Concept of Rutusandhi – Seasonal Transition Care (AH Su.3)
- Principles for smooth transition between seasons (AH Su.3)
- Preventive and promotive health strategies (AH Su.3)

**Unit V Rogānutpādaniya Adhyāya (AH Su.4)**

- Adhāraṇīya Vega: Suppression of natural urges and related disorders.
- Dharanīya Vega: Suppression-worthy urges (anger, greed, etc.)
- Shodhana Chikitsā: Importance of seasonal purification.
- Hita-Āhāra-Vihāra Sevana: Balanced food and lifestyle practices.

**Suggested project**

- Integrative project: Creating a Ṛtu-based wellness guide or calendar.

**Essential/Recommended Readings/Texts:**

1. Aṣṭāṅga Hṛdayam, Sutrasthāna – AH Su.2 (Dinacharya), AH Su.3 (Rutucharya), AH Su.4 (Roganutpādaniya)
2. Charaka Saṁhitā – Sutrasthāna, Chapter 6 (Ṛtucaryā)
3. Sushruta Saṁhitā, Sutrasthāna references to Roga-anutpatti.

**Additional Readings:**

1. Vaidya Bhagwan Dash – Fundamentals of Ayurveda.
2. Dr. P.H. Kulkarni – Ayurveda for Health & Wellness.
3. WHO Global Strategy on Traditional Medicine (For Modern Context)
4. Dr. V.P. Raghavan – Indian Knowledge Systems and Ecology.
5. Dr. P.H. Kulkarni – Seasonal Regimen in Ayurveda.

**Credits 02**
**Hours 30**

**Sanskrit Version**

## VAC 5: स्वस्थवृत्तम् ऋतुचर्या च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. आयुर्वेदिकग्रन्थेभ्यः स्वस्थवृत्तस्य आधारभूतसिद्धान्तैः सह छात्राणां परिचयः।
2. भारतीयज्ञानप्रणाल्या स्वास्थ्यरक्षणस्य जीवनशैलीप्रबन्धनस्य च संवर्धनम्।
3. ऋतोः अवधारणायाः परिचयः तथा च मानवस्वास्थ्ये व्यवहारे च तस्य प्रभावः।
4. आयुर्वेदे विशेषतः अष्टाङ्गहृदये वर्णितरीत्या ऋतुचर्याया अवगमने अनुप्रयोगे च छात्राणां क्षमतासम्पादनम्।
5. दिनचर्यया ऋतुचर्यया नैतिकजीवनेन च समग्रकल्याणाभ्यासस्य आशंसनम्।
6. स्वास्थ्यरक्षणस्य कृते ऋतुपरिवर्तनैः सह जीवनशैल्याम् आहारविहारे च अपेक्षितपरिवर्तनानां विषये जागरूकतासम्पादनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. आयुर्वेदग्रन्थेभ्यः दैनिक-ऋतुकालीन-आहारस्य (ऋतुचर्यायाः) वर्णनं करिष्यन्ति।
2. स्वस्थवृत्ते स्वच्छता-नैतिकता-मानसिकस्वास्थ्यसिद्धान्तान् अभिज्ञास्यन्ति।
3. धारणीय-अधारणीयवेगयोः (प्राकृतिक-आग्रहः) अवधारणायाः विश्लेषणं प्रबन्धनञ्च करिष्यन्ति।
4. व्यक्तिगत-सामुदायिककल्याणसंवर्धनाय स्वस्थवृत्त-अवधारणानाम् अनुप्रयोगं करिष्यन्ति।
5. आयुर्वेदानुसारम् ऋतुनां वर्गीकरणं तेषां संक्रमणं च अभिज्ञास्यन्ति।
6. अष्टाङ्गहृदये प्रत्येकम् ऋतोः विहितान् विस्तृत-आहारान् व्याख्यास्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| VAC 5 | स्वस्थवृत्तम् ऋतुचर्या च | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. स्वस्थवृत्तस्य शास्त्रीयग्रन्थानां च परिचयः।**

- स्वस्थवृत्तस्य परिभाषा व्याप्तिश्च।
- निदानस्य महत्त्वम् (Importance of prevention)
- स्वास्थ्यसंरक्षणे (Maintaining well being) अष्टाङ्गहृदयस्य सूत्रस्थानस्य भूमिका।
- धर्म-आचार-सद्वृत्तानां च सम्प्रत्ययः।

- आयुर्वेदीयजीवनशैल्यां मनश्शरीरयोः सम्बन्धः।

**अन्वितिः २. दिनचर्यायाा अध्यायः (अष्टाङ्गहृदयं, सूत्रस्थानम् – 2)**

- दिनचर्याविहारः (जागरणं, दन्तधावनं, अभ्यङ्गं, व्यायामः इत्यादयः)
- शुद्धि-नियमः (व्यक्तिगतस्वच्छता शुद्धीकरणदिनचर्या च)
- धर्माचरणं सद्वृत्तपालनञ्च (नैतिकजीवन-आचरणानि)

**अन्वितिः ३. ऋतुचर्यायाः परिचयः ऋतुवर्गीकरणं च। (अष्टाङ्गहृदयं, सूत्रस्थानम् – 3)**

- ऋतोः परिभाषा महत्त्वं च।
- ऋतुपरिवर्तनेषु सूर्यचन्द्रयोः पर्यावरणस्य च प्रभावः।
- ऋतुषु स्वास्थ्यस्य प्रतिरोधकशक्तेः दोषस्य च वैविध्यम्।
- उत्तरायणम् (आदानकालः): शिशिरः, वसन्तः, ग्रीष्मः।
- दक्षिणायनं (विसर्गकालः): वर्षा, शरद्, हेमन्तः।
- जठराग्नौ वात-पित्त-कफानां प्रभावाः।

**अन्वितिः ४. विस्तृत-ऋतुविधयः (ऋतुचर्या) (अष्टाङ्गहृदयं, सूत्रस्थानम् – 3)**

- अधोदत्तऋतुषु आहारः व्यवहारः वस्त्रं दिनचर्या इत्यादयः।
  - ग्रीष्मः।
  - शिशिरः।
  - वसन्तः।
  - वर्षा।
  - शरद्।
  - हेमन्तः।
- ऋतुसन्धेः अवधारणा – ऋतुसंक्रमणपरिचर्या।
- ऋतुद्वयोर्मध्ये सुचारुसंक्रमणस्य सिद्धान्ताः।
- नैदानिकसंवर्धकस्वास्थ्यव्यूहाः।

**अन्वितिः ५. रोगानुत्पादनीयः अध्यायः (अष्टाङ्गहृदयं, सूत्रस्थानम् – 4)**

- अधारणीयवेगाः (प्राकृतिक-आग्रहाणां दमनं तेन च विकाराणाम् उत्पत्तिः।
- धारणीयवेगाः (दमनयोग्य-आग्रहाः - क्रोधलोभादयः)
- शोधनचिकित्सा : ऋतुशुद्धिमहत्त्वम्।
- हिताहार-विहारसेवनम् : (संतुलितभोजनं, संतुलितजीवनशैली-अभ्यासश्च)।

**प्रस्तावितपरियोजना (Project Suggestions)**

1. ऋतु-आधारितायाः स्वास्थ्यमार्गदर्शिकायाः वा दैनन्दिन्याः निर्माणम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. अष्टाङ्गहृदयं, सूत्रस्थानम् – अ.2 (दिनचर्या), अ.3 (ऋतुचर्या), अ.4 (रोगानुत्पादनीयः)
2. चरकसंहिता - सूत्रस्थानम्, अध्यायः 6 (ऋतुचर्या)
3. सुश्रुतसंहिता, सूत्रस्थानम् रोग-अनुत्पत्तिसन्दर्भः।

**सहायकाः ग्रन्थाः (Additional Readings)**

1. वैद्यः भगवानदाशः – आयुर्वेद कि मूल बातें।
2. डॉ. पी.एच. कुलकर्णी – स्वास्थ्य एवं कल्याण हेतु आयुर्वेद
3. पारम्परिकचिकित्साविषये WHO वैश्विकव्यूहः (आधुनिकसन्दर्भार्थं)
4. डॉ. वि.पि. राघवन – भारतीय ज्ञान प्रणाली एवं पारिस्थितिकी विज्ञान
5. डॉ. पी.एच. कुलकर्णी – आयुर्वेद में ऋतुकालीन आहार

**Credits - 4**
**Hours - 60**

## VAC 6: Western and Modern Indian Thinkers and the Global Impact of Yoga

**Course Objectives:**

1. To introduce students to major Western thinkers influenced by Indian philosophy and yogic traditions.
2. To explore how modern Indian spiritual and philosophical figures shaped global thought and consciousness.
3. To analyze the interdisciplinary intersections of yoga with science, linguistics and psychology.
4. To understand the global cultural impact of yoga on art, literature, film and music from the 18th century onwards.
5. To critically examine how yoga has been received, adapted and integrated into global intellectual and spiritual traditions.

**Learning Outcomes:**

After completion of the course, the students will:

1. Identify key Western thinkers and scientists whose work reflects influence from Indian yogic and philosophical traditions.
2. Analyze the philosophical bridges between Eastern (especially Indian) and Western worldviews across disciplines.
3. Evaluate the contributions of modern Indian spiritual leaders in shaping the global narrative on consciousness, wellbeing and spiritual growth.
4. Demonstrate an understanding of yoga's role in shaping Western literature and arts since the 18th century.
5. Construct comparative frameworks for understanding the mutual influences between Indian and Western intellectual traditions.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 6 | Western and Modern Indian Thinkers and the Global Impact of Yoga | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Western Thinkers and Yogic Influence.**

- Ralph Waldo Emerson, Walt Whitman, Henry David Thoreau, Christopher Isherwood, Aldous Huxley, Joseph Campbell, Alan Watts, William Somerset Maugham, William James, George Harrison.

**Unit II Scientists, Linguists and Thinkers.**

- Nikola Tesla, David Bohm, Erwin Schrödinger, Carl Sagan, Fritjof Capra, Ram Dass (Richard Alpert), Daniel Goleman, Patrick Geddes, Dennis Bait, Leonard Bloomfield, Noam Chomsky Etc.

**Unit III Modern Indian Spiritual Influencers.**

- Influential Indian Philosophers and Spiritual Teachers Who Shaped the Western Mind, Like -

- Svāmī Vivekānanda, Paramahaṃsa Yogananda, Śrī Aurobindo, Maharṣi Maheśa Yogi, Ācārya Rajnīśa (Ośo) J. Kṛṣṇamūrti, Svāmī Śivānanda, B. K. S. Āyaṅgara, Śrī Kṛṣṇamācārya, Maharṣi Rāmaṇa

**Unit IV Global Cultural Impact of Yoga.**

- (The Influence of Yoga on Various Fields: From the 18th Century Onwards on Western Art, Culture, Film and Literature)

**Essential/Recommended Readings/Texts:**


1. Vivekananda, Swami. (1896). Raja Yoga. Kolkata: Advaita Ashram.
2. Yogananda, Paramahansa. (1946). Yogi story nectar. Los Angeles: Self-Realization Fellowship.
3. Krishnamurthy, G.S. (1954). Self-thinking. Chennai: Krishnamurthy Foundation.
4. Aurobindo, Shri. (2005). The means of yoga. Pondicherry: Sri Arvinda Ashram.
5. Shankaracharya. (8th century). Vivekachudamani. Varanasi: Chaukhamba Sanskrit Bhavan.
6. Patanjali. (bust). Yoga Sutras (ed. Swami Hariharananda). Haridwar: Kaushika Ashram.


**Additional Readings:**


1. Huxley, A. (1945). The Perennial Philosophy. London: Harper & Brothers.
2. Campbell, J. (1949). The Hero with a Thousand Faces. Princeton University Press.
3. Watts, A. (1957). The Way of Zen. New York: Pantheon Books.
4. Maharshi Mahesh Yogi. (1966). Science of Being and Art of Living. New York: New American Library.
5. Capra, F. (1975). The Tao of Physics. Berkeley: Shambhala.
6. Goleman, D. (2003). Destructive Emotions: A Scientific Dialogue with the Dalai Lama. New York: Bantam.

**Credits - 4**
**Hours - 60**

**Sanskrit Version**

## VAC 6: पाश्चात्यविचारकाः तथा आधुनिकभारतीय-विचारकाः योगस्य वैश्विकप्रभावश्च

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयदर्शनेन योगपरम्परया च प्रभावितानां प्रमुखपाश्चात्यचिन्तकानां परिचयः।
2. आधुनिकभारतीय-आध्यात्मिक-दार्शनिक-व्यक्तिभिः वैश्विकचिन्तनस्य, चेतनायाः च कथम् आकारः चित्रितः इत्यस्य गवेषणम्।
3. विज्ञानेन भाषाविज्ञानेन मनोविज्ञानेन च सह योगस्य अन्तःशास्त्रीयसमन्वयस्य विश्लेषणम्।
4. 18 शताब्द्याः आरभ्य कला-साहित्य-चलच्चित्र-संगीतादिषु योगस्य वैश्विकसांस्कृतिकप्रभावस्य अवगमनम्।
5. योगप्राप्तेः आत्मसात्करणस्य विश्वस्य बौद्धिक-आध्यात्मिक-परम्परासु एकीकरणस्य च समीक्षात्मकरूपेण परीक्षणम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. प्रमुखपाश्चात्यचिन्तकानां वैज्ञानिकानां च कृतिषु भारतीययोगदार्शनिकपरम्पराणां प्रभावः प्रतिबिम्बितः भवतीति अभिज्ञास्यन्ति।
2. पूर्वीय(विशेषतः भारतीय)-पाश्चात्य-वैश्विकदृष्टिकोणयोः मध्ये दार्शनिकसेतोः विश्लेषणं कर्तुं शक्ष्यन्ति।
3. चेतनायां कल्याणे आध्यात्मिकवृद्धौ च वैश्विककथनस्य स्वरूपनिर्माणे आधुनिकभारतीय-आध्यात्मिकनेतॄणां योगदानस्य मूल्याङ्कनं कर्तुं शक्ष्यन्ति।
4. 18 शताब्दम् आरभ्य पाश्चात्यसाहित्यस्य, कलानां च स्वरूपनिर्माणे योगस्य भूमिकाम् अवगमिष्यन्ति।
5. भारतीय-पाश्चात्य-बौद्धिक-परम्पराणां मध्ये परस्परं प्रभावानाम् अवगमनाय तुलनात्मक-संरचनां निर्मातुं शक्ष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| VAC 6 | पाश्चात्यविचारकाः तथा आधुनिकभारतीयविचारकाः योगस्य वैश्विकप्रभावश्च। | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. पाश्चात्यविचारकाः योगस्य प्रभावश्च।**

- राल्फ वाल्डो एमर्सन्
- हेनरी डेविड थोरो
- वाल्ट् व्हिटमैन्
- क्रिस्टोफर इशरवुड्

- अल्डौस् हक्सले
- जोसेफ् कैम्पबेल्
- एलन वाट्स्
- विलियम समरसेट् मौघम्
- विलियम जेम्स्
- जॉर्ज हैरिसन

**अन्वितिः २. वैज्ञानिकाः भाषाविदः विचारकाः च।**

- निकोला टेस्ला
- डेविड बोहम
- इरविन श्रोडिङ्गर
- कार्ल सगन
- फ्रिटजोफ् काप्रा
- डैनियल गोलमैन
- पैट्रिक गेड्डेस्
- डेनिस बैट
- लियोनार्ड ब्लूमफील्ड
- नोआम चॉम्स्की

**अन्वितिः ३. आधुनिकभारतीय-आध्यात्मिकप्रभावकाः।**

पाश्चात्यमानसिकतां प्रभावकाणां भारतीयदार्शनिकानाम् आध्यात्मिकशिक्षकाणां च परिचयः।

- स्वामीविवेकानन्दः।
- परमहंसः योगानन्दः।
- श्री अरबिन्दो।
- महर्षिः महेशयोगी।
- आचार्यः रजनीश (ओशो)।
- महर्षिः रमणः।
- जे. कृष्णमूर्तिः।
- स्वामी शिवानन्दः।
- बी.के.एस. आयंगर।
- श्री कृष्णमाचार्यः।

**अन्वितिः ४. योगस्य वैश्विकसांस्कृतिकप्रभावः।**

- १८ शताब्दम् आरभ्य पाश्चात्यकलासु संस्कृतौ चलच्चित्रे साहित्ये च योगस्य प्रभावः।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. विवेकानन्दः, स्वामी (1896) राजयोगः, कोलकाताः अद्वैत आश्रमः।
2. योगानन्दः, परमहंसः (1946) योगी कथामृतम्, लास एञ्जेलेस्: सेल्फ-रियलाइज़ेशन फेलोशिप्।
3. कृष्णमूर्तिः, जि. (1954) स्वचिन्तनम्, चेन्नईः कृष्णमूर्ति फाउण्डेशन।
4. औरोबिन्दः, श्री (2005) योगसाधनम्, पाण्डिचेरीः श्रीअरविन्दाश्रमः।
5. शंकराचार्यः, (8वीं शती) विवेकचूडामणिः, वाराणसी चौखम्बा संस्कृत भवनम्।
6. पतञ्जलिः, (पूर्वार्धम्) योगसूत्राणि (सम्पा. स्वामी हरिहरानन्द) हरिद्वारः, कौषिकाश्रमम्।


**सहायकाः ग्रन्थाः (Additional Readings)**


1. Huxley, A. (1945). *The Perennial Philosophy*. London: Harper & Brothers.
2. Campbell, J. (1949). *The Hero with a Thousand Faces*. Princeton: Princeton University Press.
3. Watts, A. (1957). *The Way of Zen*. New York: Pantheon Books.

4. Maharshi Mahesh Yogi. (1966). *Science of Being and Art of Living*. New York: New American Library.
5. Capra, F. (1975). *The Tao of Physics*. Berkeley: Shambhala.
6. Goleman, D. (2003). *Destructive Emotions: A Scientific Dialogue with the Dalai Lama*. New York: Bantam.

Credits - 4
Hours - 60

## VAC 7: Prācīna-Bhāratīya Samājavyavasthā (Ancient Indian Social System)

**Course Objectives:**

1. To introduce students to the foundational principles of the ancient Indian social system.
2. To critically explore the concept of puruṣārtha-s and their role in the individual and collective life.
3. To understand the definitions and meanings of dharma, artha and their applications through classical sources.
4. To evaluate the cultural and unifying significance of Indian festivals, pilgrimages and sacred geography.
5. To examine ethical and administrative ideals as reflected in Indian epics and scriptures.

**Learning Outcomes:**

After completion of the course, the students will:

1. Define and explain the four puruṣārthas and their meanings based on Sanskrit etymology.
2. Identify and compare scriptural definitions of dharma from key texts.
3. Examine the role of sacred spaces and rituals in shaping national unity and cultural continuity.
4. Interpret ethical and political teachings in the Mahābhārata, Rāmāyaṇa and Bhagavadgītā.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 7 | Prācīna-Bhāratīya Samājavyavasthā (Ancient Indian Social System) | 04 | 0 | 0 | 04 |

**Details of Course:**

**Unit I Concept of Puruṣārtha and Dharma.**

- Definitions of each puruṣārtha; (The meaning, origin and etymology.)
- The four puruṣārthas: Dharma, Artha, Kāma, Mokṣa.
- Dharma-puruṣārtha, Artha-puruṣārtha and society.
- Scriptural definitions of Dharma: from Mahābhārata, Manusmṛti, etc.
- Types of actions: Kāmya, Nitya, Niṣiddha, Naimittika, Prāyaścitta, Upāsanā.
- Societal view of Tīrthayātrā, Utsava, Sapta-purī and Jyotirliṇga, their role in the unity and integrity of Bhārata.

**Unit II Ethical Dualities in the Bhagvad Gītā.**

- Daivī and Āsurī Sampat (Divine and Demoniac Qualities) (Bhagavadgītā, Chapter 16).

**Unit III Ideal Kingship and Character in the Rāmāyaṇa.**

- Śrī Rāma's character as portrayed in Vālmīki Rāmāyaṇa.

- Study and interpretation of state administration as described in Vālmīki Rāmāyaṇa.

**Unit IV Knowledge and Governance in the Mahābhārata**.

- Review of the Mahābhārata as a treasure trove of knowledge.
- Important teachings of Rājadharma from Viduranīti.

**Essential/Recommended Readings/Texts:**


1. Gupta, Rajendra Prasad (1995), Political Elements in the Valmiki Ramayana, Delhi, Eastern Book Linkers.
2. Maharshi Ved Vyasa, Mahabharata, Gita Press, Gorakhpur.
3. Shrimad Bhagavad Gita (with Shankaracharya's Commentary), (Samvat 2056 / 1999-2000 AD), Gita Press, Gorakhpur, Gorakhpur-273005.

**Credits - 4**
**Hours - 60**

**Sanskrit Version**

## VAC 7: प्राचीनभारतीयसमाजव्यवस्था

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. प्राचीनभारतीयसामाजिकव्यवस्थायाः मूलतत्त्वानां विषये छात्रेभ्यः परिचयप्रदानम्।
2. पुरुषार्थस्यावधारणा एवञ्च वैयक्तिक-सामूहिकजीवनयोः तस्याः भूमिकायाः आलोचनात्मकम् अन्वेषणम्।
3. शास्त्रीयस्रोतसां माध्यमेन धर्मार्थयोः परिभाषाः, अर्थाः तेषामनुप्रयोगाणाञ्च परिज्ञानम्।
4. भारतीय-उत्सवानां, तीर्थयात्राणां, भूगोलविषयाणां सांस्कृतिकेन, ऐक्यात्मक-महत्त्वेन च सह सम्बन्धस्थापनम्।
5. भारतीयेतिहासेषु शास्त्रेषु च प्रतिबिम्बितानां नैतिकानां प्राशासनिकानाम् आदर्शानां संवर्धनम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनं विधाय छात्राः -

1. संस्कृतव्युत्पत्त्यनुसारेण चतुर्विधपुरुषार्थान् (धर्म-अर्थ-काम-मोक्षान्) तदर्थांश्च परिभाषितुं शक्ष्यन्ति।
2. प्रमुखशास्त्रग्रन्थेषु धर्मस्य शास्त्रीयपरिभाषाः अन्वेष्टुम् शक्ष्यन्ति।
3. राष्ट्रस्य ऐक्यतायाः सांस्कृतिकपरम्परायाश्च विकासे पवित्रस्थानानां संस्काराणां च भूमिकां ज्ञातुं पारयन्ति।
4. महाभारते, रामायणे, भगवद्गीतायां च वर्णितानां नैतिकराजनैतिकशिक्षाणां च विश्लेषणपूर्वकं विवेचनं करिष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् ((Credit Distribution of the Course)) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| VAC 7 | प्राचीनभारतीय-समाजव्यवस्था | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. धर्मः पुरुषार्थाः च।**

- पुरुषार्थाणां परिभाषा। (अर्थः, उत्पत्तिः व्युत्पत्तिश्च।)
- चत्वारः पुरुषार्थाः - धर्मः, अर्थः, कामः मोक्षश्च।
- धर्मपुरुषार्थः, अर्थपुरुषार्थः, समाजश्च।
- महाभारतं, मनुस्मृतिः इत्यादिभ्यः ग्रन्थेभ्यः धर्मस्य परिभाषाः अर्थाश्च।
- कर्माणि – काम्य-नित्य-निषिद्ध-नैमित्तिक-प्रायश्चित्त-उपासनादीनि।
- सामाजिकदृष्ट्या तीर्थयात्रा-पर्व-सप्तपुरी-द्वादशज्योतिर्लिंगस्थलानि, भारतस्य एकतायाः अखण्डतायाश्च विषये तेषां महत्त्वम्।

**अन्वितिः २. भगवद्गीतायां नैतिकद्वन्द्वाः।**

- दैवी आसुरी च संपत् (भगवद्गीतायाः अध्याय सं. 16)

**अन्वितिः ३. रामायणे आदर्शनृपत्वं चरित्रं च।**

- वाल्मीकिरामायणे श्रीरामस्य पात्रचित्रणम्।
- वाल्मीकिरामायणे वर्णितस्य राज्यप्रशासनस्य अध्ययनं व्याख्या च।

**अन्वितिः ४. महाभारते ज्ञानं शासनं च।**

- ज्ञाननिधित्वेन महाभारतस्य समीक्षा।
- राजधर्मविषये विदुरनीतेः महत्वपूर्ण-उपदेशानां विवरणम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. गुप्त. राजेन्द्र प्रसाद, (1995), वाल्मीकि रामायण में राजनीतिक तत्त्व दिल्ली, ईस्टर्न बुक लिंकर्स।
2. महर्षि वेद व्यास, महाभारत ,गीताप्रेस, गोरखपुर।
3. श्रीमद्भगवद्गीता (शाङ्करभाष्य), (सं० २०५६), गीताप्रेस गोरखपुर, गोरखपुर-२७३००५
4. वाल्मीकिरामायणम्, गीताप्रेस, गोरखपुरम्

**Credits - 4**
**Hours - 60**

## VAC 8: Constitutional Values and Duties

**Course Objectives:**

1. To develop an understanding of constitutional values, fundamental duties and their significance in governance, corporate ethics.
2. To enable them for analyzing contemporary challenges and solutions in Sanskrit and modern research.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand the foundational values enshrined in the Indian Constitution and their relevance in commerce.
2. Analyze the significance of fundamental duties in fostering responsible business practices.
3. Examine the role of governance and institutions in upholding constitutional values in trade and corporate sectors.
4. Evaluate contemporary challenges to constitutional principles in business and suggest solutions.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 8 | Constitutional Values and Duties | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Constitutional Values:**

- Meaning and significance of constitutional values in Indian society and Sanskrit education.
- Sources of constitutional values — Preamble, philosophical foundations in Indian traditions (e.g., Dharmashastra, Nyaya)
- Key constitutional values:
  - Justice (न्यायः) – social, economic, educational.
  - Liberty (स्वातन्त्र्यम्) – thought, expression, belief (especially in academic and literary fields)
  - Equality (समता) – linguistic, educational, cultural rights.
  - Fraternity (बंधुत्वम्) – national integration and cultural harmony.
- Concept of Constitutional Morality (संविधाननीतिः) and its contemporary relevance in Sanskrit education, knowledge preservation and heritage management.
- Reflection of constitutional values in ancient Sanskrit texts (e.g., Manusmriti, Arthashastra, Mahabharata)

**Unit II Fundamental Rights and Directive Principles of State Policy.**

- Scope and importance of fundamental rights in Sanskrit education and linguistic-cultural rights.
- Limitations and reasonable restrictions in the context of preservation and propagation of Sanskrit and Indian knowledge traditions.

Directive Principles of State Policy (DPSP):

- Objectives and relevance to education, cultural heritage and knowledge dissemination policies.
- Implementation of DPSP in promoting Sanskrit, arts, literature and national cultural identity.
- Relationship between Fundamental Rights and DPSP concerning cultural education and linguistic minorities.
- Landmark judicial interpretations and case laws (related to language rights, education rights, cultural rights)

**Unit III Fundamental Duties.**

- Concept and evolution of fundamental duties — with emphasis on cultural preservation, promotion of Sanskrit and heritage conservation.
- Legal enforceability and practical implications of fundamental duties related to education and culture.
- Role of educational institutions, scholars and cultural organizations in upholding fundamental duties (e.g., promoting Sanskrit, protecting monuments, preserving manuscripts)
- Comparative analysis of cultural duties and constitutional obligations in other democracies (e.g., UNESCO cultural conventions, linguistic rights globally)

**Unit IV Governance and Constitutional Values.**

- Role of Executive, Legislature, Judiciary in protecting linguistic, cultural and educational values.
- Ethical governance and rule of law in cultural and educational institutions.

Constitutional provisions ensuring:

- Social justice in education (equal access to knowledge systems)
- Labor laws in heritage preservation sectors (e.g., artisans, temple workers, manuscript conservators)
- Economic inclusivity in cultural industries (e.g., Sanskrit teaching, publishing, traditional arts)
- Judicial activism, Public Interest Litigation (PIL) and accountability in protecting cultural and linguistic heritage.

**Unit V Contemporary Challenges and Way Forward.**

- Challenges to constitutional values in the realm of Sanskrit and cultural education:
- Neglect of classical languages, cultural homogenization, lack of institutional support.

- Role of media and civil society in strengthening constitutional ethics in cultural preservation and Sanskrit revival.
- Need for education and awareness to enhance constitutional literacy in cultural and linguistic rights.
- Global perspectives on constitutional values and duties in preserving languages, cultural heritage and traditional knowledge (e.g., international charters, linguistic rights frameworks)

**Essential/Recommended Readings/Texts:**


1. Granville Austin, The Indian Constitution: Cornerstone of a Nation
2. B. R. Ambedkar's Speeches and Writings on Constitutional Morality
3. D. D. Basu, Introduction to the Constitution of India
4. M. P. Jain, Indian Constitutional Law
5. S. P. Sathe, Judicial Activism in India
6. Corporate Governance Reports and Business Ethics Case Studies.

**Credits - 2**
**Hours - 30**

## VAC 9: Modern and Globally Accepted Concepts in Sanskrit

**Course Objectives:**

1. To explore Sanskrit concepts that have influenced or aligned with modern global disciplines.
2. To examine the contemporary relevance and applications of Sanskrit knowledge systems.
3. To understand the philosophical, linguistic, scientific and cognitive depth embedded in Sanskrit texts.
4. To promote appreciation for Sanskrit as a living, analytical and universal language.

**Learning Outcomes:**

After completion of the course, the students will:

1. Identify and define globally accepted Sanskrit-origin concepts in various domains.
2. Analyze philosophical and scientific models from Sanskrit literature.
3. Apply Sanskrit-based frameworks in fields like linguistics, logic and AI.
4. Reflect on the universal value and adaptability of Sanskrit concepts.
5. Relate Sanskrit texts to contemporary global dialogues in wellness, ecology, etc.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 9 | Modern and Globally Accepted Concepts in Sanskrit | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Sanskrit as a Scientific and Universal Language.**

- Structure of Sanskrit: Root-based, phonetic precision, syntactic clarity.
- Paninian grammar and formal language theory.
- Use of Sanskrit in AI, NLP, machine learning.

**Readings**:

- Pāṇini's Aṣṭādhyāyī (selected sūtras)
- Sanskrit in computational linguistics.

**Unit II Sanskrit and Philosophy of Mind.**

- Concepts of consciousness (Caitanya, Chitta, Buddhi)
- Yoga Sutras of Patanjali: Cognitive psychology and behavior.
- Advaita Vedanta and the philosophy of non-duality (Universal Consciousness)

**Readings**:

- Patanjali's Yoga Sutras (selected sutras)
- Mandukya Upanishad and Gaudapada Karika excerpts.

**Unit III Sanskrit and Ecology / Sustainability.**

- Ṛgvedic hymns and ecological consciousness.

- Five Mahābhūtas and interdependence in nature.
- Dharma-based environmental ethics (Manusmriti, Mahabharata, Arthashastra)
- Integration with global environmental movements and policy ideas.

**Readings**:

- Selections from Ṛgveda, Mahabharata (Shanti Parva), Manusmṛti.

**Unit IV Sanskrit, Mathematics and Logic.**

- Sanskrit roots of logical reasoning: Nyaya and Tarka.
- Indian contributions to epistemology and inference (Pramāṇa)
- Binary logic, Nyaya syllogism vs. Aristotelian logic.
- Modern logic and AI systems inspired by Sanskritic logic.

**Readings**:

- Nyaya Sutras of Gautama (selected sutras)
- Comparison with modern logic systems.

**Essential/Recommended Readings/Texts:**


1. Subhash Kak – The Architecture of Knowledge.
2. Gaurinath Shastri – A History of Indian Logic.
3. Kapil Kapoor – Dimensions of Panini Grammar.
4. Michel Danino – Indian Mind Then and Now.
5. NASA papers on Sanskrit and AI (e.g., Rick Briggs, 1985)

Credits - 2
Hours - 30

## VAC 10: Bharatiya Contributions to Global Knowledge

**Course Objectives:**

1. To introduce students to major contributions of India to global knowledge systems.
2. To explore Bharatiya developments in science, technology, arts and humanities across ages.
3. To critically examine the transmission of Indian knowledge to other cultures.
4. To build awareness and pride in the rich intellectual traditions of Bharat.

**Learning Outcomes:**

After completion of the course, the students will:

1. Identify key contributions made by Indian scholars and traditions in diverse fields.
2. Explain the scientific, philosophical and literary advancements from India.
3. Analyze the historical transmission of Indian knowledge to other civilizations.
4. Apply Bharatiya knowledge concepts in contemporary interdisciplinary contexts.
5. Appreciate and reflect on the global relevance of Indian intellectual heritage.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 10 | Bharatiya Contributions to Global Knowledge | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Bharatiya Knowledge Systems (IKS).**

- Definition, Scope and Significance of IKS.
- Characteristics of Bharatiya Knowledge Traditions.
- Shruti, Smriti and Lok Parampara.
- Ancient centers of learning: Takshashila, Nalanda, Vikramshila, Vallabhi.
- Methods of knowledge preservation and transmission.

**Essential/Recommended Readings/Texts:**

- Michel Danino – *The Indian Mind Then and Now*
- Kapil Kapoor – *Text and Interpretation: The Indian Tradition*

**Unit II Indian Contributions to Science and Mathematics.**

- Sulba Sutras: Geometry and altar constructions.
- Aryabhata, Brahmagupta, Bhaskara II: Astronomy, Algebra, Arithmetic and Zero.
- Kerala School of Mathematics (Madhava, Jyesthadeva) and Calculus.
- Indian systems of weights, measurements, metallurgy (e.g., Iron Pillar of Delhi).

**Essential/Recommended Readings/Texts:**

- A.K. Bag – *History of Mathematics in India.*
- D. Pingree – *Mathematical Astronomy in India.*

**Unit III Indian Contributions to Medicine and Life Sciences.**

- Ayurveda: Charaka Samhita and Sushruta Samhita.
- Surgery, Anatomy and Diagnostics in ancient India.
- Concepts of health, disease and prevention.
- Veterinary sciences and plant medicine.

**Essential/Recommended Readings/Texts:**

- Dominik Wujastyk – *The Roots of Ayurveda.*
- P.V. Sharma – *History of Medicine in India.*

**Unit IV Indian Contributions to Language, Literature and Philosophy.**

- Sanskrit as a scientific and philosophical language.
- Grammar (Panini's Ashtadhyayi), Poetics (Natya Shastra) and Logic (Nyaya).
- Indian schools of philosophy: Nyaya, Vaisheshika, Samkhya, Yoga, Mimamsa, Vedanta.
- Buddhist and Jain philosophical dissemination to East Asia.

**Essential/Recommended Readings/Texts:**

- S.N. Dasgupta – *A History of Indian Philosophy.*
- B.K. Matilal – *Logic, Language and Reality.*

**Unit V Indian Knowledge in Arts, Architecture and Music.**

- Temple architecture: Nagara, Dravida and Vesara styles.
- Indian painting traditions: Ajanta, Mughal, Pahari.
- Natya Shastra and performing arts: Dance, Drama, Music.
- Transmission of art traditions through trade, travel and diaspora.

**Essential/Recommended Readings/Texts:**

- Stella Kramrisch – *The Hindu Temple.*
- Kapila Vatsyayan – *Indian Classical Dance and Theatre.*

**Unit VI Transmission of Bharatiya Knowledge to the World.**

- Transmission routes: Silk Road, Arab traders, colonial scholars.
- Indian texts translated into Arabic, Persian, Latin, etc.
- Contemporary relevance and revival: Yoga, Ayurveda, Meditation globally.

**Essential/Recommended Readings/Texts:**

- George Gheverghese Joseph – The Crest of the Peacock.
- Rajiv Malhotra – The Battle for Sanskrit.

**Credits - 2**
**Hours - 30**

## VAC 11: Idea of Bharat

**Course Objectives:**

1. Understand the foundational concepts and timeless essence of *Bharatvarsha* as a civilizational entity.
2. Appreciate the richness and depth of Indian literary, philosophical and spiritual traditions.
3. Explore the evolution of Indian languages, art forms and the indigenous education system.
4. Analyze Indian perspectives on *Dharma*, philosophy (*Darshan*) and global harmony through *Vasudhaiva Kutumbakam*.
5. Examine the contributions of ancient India to science, environment, medicine and mathematics.

**Learning Outcomes:**

After completion of the course, the students will:

1. Define and explain the concept of *Bharatvarsha* and its eternal, civilizational relevance.
2. Identify and discuss the significance of key Indian texts including the Vedas, Upanishads, Puranas, Jain and Buddhist literature.
3. Trace the development of ancient Indian scripts and languages such as Brahmi, Kharoshthi, Pali, Prakrit and Sanskrit.
4. Describe the salient features of Indian art and cultural heritage.
5. Interpret Indian philosophical views on *Dharma* and the interconnectedness of individuals, society and the world.
6. Apply the idea of *Vasudhaiva Kutumbakam* to contemporary global issues.
7. Explain ancient India's achievements in fields such as astronomy, metallurgy, medicine (Ayurveda) and mathematics.
8. Understand the health and wellness practices rooted in Yoga and Naturopathy.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 25 | Idea of Bharat | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Concept of Bharatvarsha.**

Focus: Historical, spiritual and literary identity of Bharat.

- Understanding of Bharatvarsha – Historical and civilizational overview.
- Eternity of Bharat – Philosophical and timeless view of India as a civilization.
- Indian Literature's Glory –
  - Vedas & Vedanga – Core scriptural texts and auxiliary sciences.
  - Upanishads – Philosophical treatises.

    - Epics – *Ramayana*, *Mahabharata.*
    - Jain & Buddhist texts – Ethical and spiritual dimensions.
- Smritis & Puranas – Societal codes and mytho-historical narratives.

**Unit II Indian Knowledge Tradition, Art and Culture.**

Focus: Language, aesthetics and education.

- Evolution of Language & Script –
    - Scripts: Brahmi, Kharoshthi.
    - Languages: Pali, Prakrit, Sanskrit.
- Indian Art & Culture – Architecture, sculpture, dance, music and painting.
- Traditional Education System – Gurukul, oral traditions, holistic learning.

**Unit III Dharma, Philosophy and Vasudhaiva Kutumbakam.**

Focus: Ethical, metaphysical and societal ideals.

- Indian View on Dharma and Philosophy (Darshan) – Six schools, spiritual duties.
- Vasudhaiva Kutumbakam – "World as one family": From self to society to cosmos.
- Polity and Governance – Ancient political thought and administrative systems.

**Unit IV Science, Environment and Medical Science.**

Focus: Practical contributions of ancient India.

- Science & Technology – Metallurgy, architecture, astronomy, etc.
- Health Systems –
    - Ayurveda – Science of life.
    - Yoga & Naturopathy – Holistic wellness.
- Mathematics & Numerals – Decimal system, zero, algebra, geometry.

**Essential/Recommended Readings/Texts:**


1. Idea of Bharat, Curriculum of BA History, First Semester, (IDE-HIS-001-CC-1110), Institute of Distance Education, Rajiv Gandhi University, Arunachal Pradesh, INDIA – 791112.

**Credits - 2**
**Hours - 30**

## VAC 12: Emotional Intelligence

**Course Objectives:**

1. To introduce the concept of emotional intelligence, including its models and components, while highlighting its significance in self-growth and building effective relationships.
2. To help students identify the measures of emotional intelligence.

**Learning Outcomes:**

After completion of the course, the students will:

1. Develop skills in self-awareness, self-management, social awareness, and relationship management.
2. Discover and enhance personal competence and apply techniques to build emotional intelligence.
3. Gain insights into establishing and maintaining positive relationships.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 12 | Emotional Intelligence | 02 | 0 | 0 | 02 |

**Unit I Fundamentals of Emotional Intelligence.**

- Nature and Significance.
- Models of emotional intelligence: Ability, Trait and Mixed.
- Building blocks of emotional intelligence: self-awareness, self-management, social awareness and relationship management.

**Unit II Personal Competence.**

- Self-Awareness: Observing and recognizing one's own feelings,
- Knowing one's strengths and areas of development;
- Self-Management: Managing emotions, anxiety, fear and anger.

**Unit III Social Competence.**

- Social Awareness: Others' Perspectives, Empathy and Compassion
- Relationship Management: Effective communication, Collaboration, Teamwork and Conflict management

**Unit IV Emotional Intelligence: Measurement and Development.**

- Measures of emotional intelligence; Strategies to develop and enhance emotional intelligence.

**Practical Exercises:**

1. Practice self-management techniques to regulate emotions such as Mindfulness, Conditioned relaxation response, Boundary setting, Any other.

2. Practice various techniques of relationship management such as engaging with Display of empathy, Effective communication, Teamwork, Conflict resolution, Any other
3. If required, students can share their experiences in the form of a Project Report.

**Essential/Recommended Readings/Texts:**


1. Bar-On, R., & Parker, J.D.A.(Eds.) (2000). The handbook of emotional intelligence. San Francisco, California: Jossey Bros.
2. Sternberg, R. J. (Ed.). (2000). Handbook of intelligence. Cambridge University Press.
3. Goleman, D. (2005). Emotional Intelligence. New York: Bantam Book.

Credits - 2
Hours - 30

## VAC 13: Panchkosha: Holistic Development of Personality

**Course Objectives:**

1. To introduce the Five Koshas - Annamaya, Pranamaya, Manomaya, Vigyanamaya and Anandamaya - for the holistic development of personality.
2. To generate awareness about physical and mental well-being through the Indian concept of Panchkosha.
3. To foster a positive attitude towards self, family and society and guide students in building their personalities based on this understanding.

**Learning Outcomes:**

After completion of the course, the students will:

1. Enhanced physical and mental health.
2. Coping with peer pressures and stress.
3. Improved concentration leading to better overall performance.
4. Manage life situations through a balanced and mature approach.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 13 | Panchkosha: Holistic Development of Personality | 02 | 0 | 0 | 02 |

**Details of Syllabus;**

**Unit I Elements of Personality**

- PanchaKosha: Introduction; Five aspects of Human Personality
- Annamaya Kasha (Physical body)
- Pranamaya Kosha (Vital life force energy)
- Manomaya Kosha (Psychological wellness)
- Vijnanamaya Kosha (Intellect)
- Anandamaya Kosha (Happiness and Blissfulness)
- Health: Mental and Physical.

**Unit II Annamaya Kosha and Pranamaya Kosha.**

- Human Body and Pancha Karmendriyas
- Annamaya Kosha: Balanced diet and exercise for healthy body
- Pranamaya Kosha: Development of life force, Pranayam, Charucharya: Social Etiquettes.

**Unit III Manomaya Kosha and Vijnanamaya Kosha.**

- Antahkarana and its functions.
- Pancha Gyanendriyas.

- Manomaya Kosha: Controlling the Mana (mind)
- Vijnanamaya Kasha: Ability of discretion and decision making.

**Unit IV Anandamaya Kosha and Beyond.**

- Anandamaya Kosha: Experience of happiness .and bliss.
- Self-realisation.
- Nature of Consciousness: Sat-Chit-Ananda.

**Practical Exercises:**

1. Recitation of select verses from Taitiriyopansid
2. Asana
3. Pranayama
4. Meditation
5. Visit to a Yog shivir or meditation centres
6. Students are required to watch documentaries and films on the subject-related topics.
7. If required, students can share their experiences in the form of a Project Report.
8. Any other Practical/Practice as decided from time to time

**Essential/Recommended Readings/Texts:**


1. https://ndl.iitkgp.ac.in/
2. Upanisadvakya Mahakosa. (2014). *(An Upanishadic Concordance, taken from 239 Upanishads)*. Compiled by G. S. Sadhale. Varanasi: Chowkhamba Vidyabhawan.
3. Sartain, C. (2015). *The Sacred Science of Yoga & The Five Koshas*. CreateSpace Independent Publishing.
4. Chudamani, V. (2019). *Vivek Chudamani*. Adi Shankaracharya, Swami Turiyananda (Sanskrit and English). Chennai: Sri Ramakrishna Math, Mylapore.
5. Iyengar, B. K. S. (2021). *Yoga: The Path to Holistic Health – The Definitive Step-by-Step Guide*. London: Dorling Kingsley.
6. Nishchalanand, S. *PanchaKosha: The Five Sheaths of the Human Being*. Kindle edition.
7. *DGNCC Cadet's Handbook – Specialised Subjects: Army, Navy, and Air Wing*.
8. *The Pentagon of Creation: As Expounded in the Upanishads*.

**Credits - 2**
**Hours - 30**

## VAC 14: The Art of Being Happy

**Course Objectives:**

1. To synthesize insights from human development experts, psychologists and anthropologists with the intellectual traditions of Vedantic philosophy and Indology
2. To explore the experience of happiness.
3. To illustrate the various factors that influence subjective happiness in a cross-cultural context.

**Learning Outcomes:**

After completion of the course, the students will:

1. The students shall be able to evaluate the factors contributing to the phenomenon of happiness in the personal, familial and community life of an individual in different cultures in the Indian context.
2. They will be able to develop healthy interpersonal relationships and wellbeing cherishing the values of Indian culture and philosophy.
3. They will be able to relate to the global phenomenon of sustainable development and become sensitive to the needs of the planet.
4. They will be able to apply the experience of Aananda at a personal level.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 14 | The Art of Being Happy | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Human Ecology and Happiness Lectures.**

- Definitions/Factors of Happiness.
- Environmental and Social; Physical, emotional and psychological well-being for happiness.
- Physiological and hormonal basis of happiness.
- Coping with Stress: A life saving skill.

**Unit II Indological Theories of Happiness.**

- Panch Kosh Theory & Idea of Well-Being.
- Idea of Self and other.
- Hierarchy and stages of happiness.

**Unit III Happiness: Cross-cultural Contexts.**

- Culture and Happiness.
- Interpersonal Relationship.
- Comparative Perspective.
- Towards Self- Actualization.

**Unit IV Local and Global Perspective of Happiness.**

- Measuring happiness.

- Key indicators.
- Happiness Index.
- India in Global Happiness Indices.

**Practical Exercises:**

1. Community surveys on the facilities promoting positive mental health practices such as Yoga and Meditation Centers, Recreation clubs and Parks for youth and senior citizens shall be carried out by the students
2. Extending help and social service by visiting old age homes/ hospitals/slum areas or any other disadvantaged groups
3. Students can undertake a field work/ project independently or work as an Intern with NGOs working in the area of happiness and well-being.
4. Critical appreciation of a documentary/ film based on Happiness and Wellbeing can be undertaken by the students.
5. Workshops/ Sessions for the actualization of innate creative potential- (Music, Drawing, Calligraphy, Dramatics)
6. Hands-on Happiness: Gardening, Cleaning, Washing, Cooking, etc
7. Organise Swachhata Pakhwada meetings, rallies and mobilization camps within the identified communities.
8. If required, students can share their experiences in the form of a Project Report.
9. Students may share their experiences in the form of Audio-video presentations of 15-20 minutes.
10. Any other Practical/Practice as decided from time to time.

**Essential/Recommended Readings/Texts:**


1. Leontiev, D. (2012). *Anthropology of Happiness: The State of Well-Being and the Way of Joy*. Social Science, 43(2), 93–104.
2. Banavathy, V., & Choudry, A. (2013). *Understanding Happiness: A Vedantic Perspective*. Psychological Studies, 59, 141–152. https://doi.org/10.1007/s12646-013-0230-x
3. Snyder, C. R., Lopez, S. J., & Pedrotti, J. T. (2015). *Positive Psychology: The Scientific and Practical Explorations of Human Strengths*. Sage Publications. (Chapter 5: Subjective Well-being: The Science of Happiness and Life Satisfaction, pp. 63–73).
4. World Bank. (2016). *World Development Indicators 2016*. Washington, DC: World Bank Publications.
5. Zelenski, J. (2019). *Positive Psychology: The Science of Well-Being*. Ottawa, Canada: Carleton University, Sage Publications. (Chapter 3: Happiness, pp. 77–110).

Credits - 2
Hours - 30

## VAC 15: Leadership Excellence Through Gita

**Course Objectives:**

1. To demonstrate how the Bhagavad Gita conceptualizes leadership and its role in personal and societal development.
2. To build essential skills and competencies for leadership excellence while illustrating the importance of righteousness, ethics and compassion through the wisdom of the Gita.

**Learning Outcomes:**

After completion of the course, the students will:

1. Analysis of one's strengths and weaknesses as a leader (SWOC of Self)
2. Develop leadership techniques.
3. Becoming ethical and compassionate leaders.
4. Identify the qualities of a responsible leader.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 15 | Leadership Excellence Through Gita | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Decoding Leadership through Gita.**

- Defining the role of a leader in terms of Dharma, Adharma and Arajkata and Loksangrah.
- Understanding the nuances of Dharma: Concept of Swa-Dharma, Ashrama-Dharma and Apad- Dharma (Extraordinary situations)
- Rights and Responsibilities.
- Excellence in a leader –Concepts of Karma, Vikarma and Akarma.

**Unit II Developing Leadership Qualities.**

- Leader a Karmayogi: Aspirational, Focused, Compassionate and Equanimous.
- Triguna model: Sattva, Rajas, Tamas.
- Nurturing excellence in leadership by: Reducing Tamas, Balancing Rajas, Increasing Sattva.

**Unit III Ethical and compassionate Leadership.**

- Yajna - Give back to nature.
- Dana - Give back to Society.
- Tapas - Remove weakness in self.

**Unit IV Case Studies of Leaders from Modern Bharat.**

- Lessons from life: –
- Swami Vivekanand.

- Gandhi.
- APJ Abdul Kalam.
- Ratan Tata.

**Practical Exercises:**

1. Students will do a SWOC (Strength, Weakness, Opportunity and Challenges) analysis of their personality as a Leader. Make a list of Opportunities (O) available to you for nurturing excellence in leadership.
2. Students will share a story with the class when in a difficult situation they took responsibility and displayed excellence as a leader.
3. Based on Dharma and Swadharma concepts students will make a list of the rights and responsibilities associated with them at the level of Self and Family.
4. As a youth how can you contribute towards the wellbeing of your community /campus (lokasangrah).
5. Sit in a group and discuss: (a) what are the Tamasik behaviors that you and your friends have and would like to reduce.
6. What changes can you make in your lifestyle (diet, habits and activities) to increase Satwik guna in your personality.
7. Practice Single Pointedness and Focus: Sit with your eyes closed and focus your attention unwaveringly on one particular sound that is there in your immediate environment.
8. Keep your attention on your breath while breathing in and breathing out. Do this 20 times (10 rounds). This will develop stability of the mind and balance emotions.
9. Plan some activities for the wellbeing of the campus which you as a student (or part of team) can do voluntarily to inculcate the spirit of yajna (Sewa). OR to practice the attitude of tapasya take up a project for the good of others and work on it without expecting rewards with full dedication for a few months.
10. Find ways of developing an attitude of dana.
11. Make a timetable for yourself for the next three months showing the things that you will do to develop your leadership skills.
12. Any other Practical/Practice as decided from time to time by the teacher.

**Essential/Recommended Readings/Texts:**


1. The Message of the Gita as interpreted by Sri Aurobindo. Shri Aurobindo Ashram Publication Department, Pondicherry.
2. The Bhagawad Geeta Chapter XVIII by Swami Chinmayananda. Central Chinmaya Mission Trust, MUMBAI.
3. Talks on the Gita by Vinoba Bhave -
   https://www.mkgandhi.org/talksongita/talk_gita.php
4. Essays on The Gita by Shri Aurobindo. Shri Aurobindo Ashram Publication Department, Pondicherry.
5. The Bhagavad Gita for Daily Living. Eknath Easwaran. Vols I, II & III. Jaico Publishing House.
6. Bhagavad-gita (with Vaishnava commentaries) by Narayana Gosvami, MLBD, 2013
7. श्रीमद्भगवद् गीता (साधक हिन्दी टीका), Gita Press, Gorakhpur.
8. The Bhagavadgītā or The Song Divine (With Sanskrit Text and English Translation) Gita Press, Gorakhpur.

Credits - 2
Hours - 30

## VAC 16: Art of Balanced Living

**Course Objectives:**

1. To acquaint students with the principles of the art of living as reflected in Sanskrit literature.
2. To encourage students to explore human resource management concepts rooted in Sanskrit texts.
3. To help students enhance personal effectiveness and productivity in daily life through ancient wisdom.

**Learning Outcomes:**

After completion of the course, the students will:

1. Understand key concepts and values related to the art of living as described in Sanskrit philosophical and religious literature.
2. Identify and analyze important components of human behavior and ethics as derived from classical Sanskrit texts.
3. Gain insights into the relevance of Sanskrit wisdom in addressing contemporary life challenges.
4. Appreciate the role of ancient Indian thought in human resource development and management.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 16 | Art of Balanced Living | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I**

- Method of Self-presentation
- Śravaṇa (Hearing)
- Manana (Reflection)
- Nididhyāsana (Meditation)
- Source: *Bṛhadāraṇyakopaniṣad* 2.4.5 and *Vedāntasāra*
- Concentration: Concept of Yoga
- Definition of Yoga → *Yogasūtra 1.2*: *"Yogaś citta-vṛtti-nirodhaḥ"* (Yoga is the restriction of the fluctuations of the mind)
- Means to control fluctuations:
- Abhyāsa (Practice)
- Vairāgya (Dispassion)
- Source: *Yogasūtra 1.12–16*

**Unit II**

- Eight aids to Yoga (Aṣṭāṅgayoga)

- Yama, Niyama, Āsana, Prāṇāyāma, Pratyāhāra, Dhāraṇā, Dhyāna, Samādhi
- Source: *Yogasūtra* 2.29, 2.30, 2.32, 2.46, 2.49, 2.50; 3.1–3.4
- Yoga of Action (Kriyāyoga)
- Tapas (Discipline), Svādhyāya (Self-study), Īśvarapraṇidhāna (Surrender to God)
- Source: *Yogasūtra* 2.1
- Four means of mental purity (Cittaprasādana)
- Maitrī (Friendliness)
- Karunā (Compassion)
- Muditā (Joy in others' happiness)
- Upekṣā (Equanimity)
- Source: *Yogasūtra* 1.33

**Unit III**

- Refinement of Behaviour: Means of improving behaviour
- Jñāna-yoga (Path of Knowledge): *Bhagavad Gītā*
- Chapter II: Verses 14, 15, 16, 19
- Chapter XIII: Verses 11, 12, 14, 15, 16, 19, 20, 21, 23, 29, 31, 32
- Dhyāna-yoga (Path of Meditation): *Bhagavad Gītā*
    - Chapter VI: Verses 24–27, 30, 32

**Unit IV**

- Bhakti-yoga (Path of Devotion): *Bhagavad Gītā*
- Chapter IX: Verses 17, 22, 23, 27, 29, 34
- Chapter XI: Verses 10, 11, 12, 13
- Chapter XII: Verses 4, 6–12, 20
- Concept of Karma (Action) : *Bhagavad Gītā*
- Karma as:
    - A natural impulse
    - Essential for life journey
    - Harmony with the universe
    - An ideal duty and a metaphysical dictate
    - Chapter III: Verses 5, 8, 10–16, 20, 21

**Essential/Recommended Readings/Texts:**

1. सुरेशचन्द्र श्रीवास्तव, *पातञ्जल योगदर्शन,* (2008), वाराणसी : चौखम्बा सुरभारती प्रकाशन।
2. शर्मा, राममूर्ति, *वेदान्तसारः,* दिल्ली : नैशनल पब्लिशिंग हाउस।
3. *भगवद्गीता*, गोरखपुर : गीताप्रेस।
4. महात्मा नारायण स्वामी, *उपनिषद रहस्य, एकादश उपनिषद,* दिल्ली : गोविन्द राम हासानन्द।

Credits - 2
Hours - 30

## VAC 17: Yoga And Happiness

**Course Objectives:**

1. To cultivate a pure mindset in learners which in turn reduces the possibility of corruption, crime and injustice in the society.
2. To instill a healthy mindset that allows learners to break free from themselves (addictions, depression, personal problems) and experience true change in their lives.

**Learning Outcomes:**

After completion of the course, the students will:

1. Demonstrate Asanas, Pranayama, Kriya with proficiency.
2. Demonstrate postures of Hatha Yoga, Raja Yoga and Laya Yoga.
3. Analyse the relevance of Yog Sutras in real life situation.
4. Interpret the significance of Meditation in Business Context.
5. Summarise the importance of Ayurveda in modern lifestyle.
6. Enhance their Happiness & Spiritual Quotient.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 17 | Yoga and Happiness | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction.**

- Yoga: Concept, Meaning and Origin.
- Relation between mind and body; Importance of healthy body and mind.
- Body Management Techniques: Asana, Pranayama, Kriya.
- Principles of yogic practice, Meaning of Asana, its types and principles.
- Meaning of pranayama, its types and principles.
- Impact of yoga limbs like asana, pranayama, meditation, etc. on achieving excellence in performance.

**Unit II Classical and Emerging Schools of Yoga.**

- Classical Schools of thoughts in Yoga: Hatha Yoga, Raja Yoga, Laya Yoga, Bhakti Yoga, Gyana Yoga, Karma Yoga; Asthang Yoga.
- Patanjali Yoga Sutra. Emerging schools of thoughts in Yoga.

**Unit III Meditation: A Way of Life.**

- Relation between body, breath and mind;
- Meaning of meditation and its types and principles.
- Ancient Scriptures and relevance of Meditation;
- Meaning and importance of prayer. Psychology of mantras.
- Essence of Mudras.
- Relevance of Meditation for different age groups and body requirements.
- Healing and Meditation.
- Seven layers of existence.

- Meditation for adding hours to your day, excellence at the workplace, harmony in relationships, better decision making, heightened awareness and concentration.

**Unit IV Yoga & Meditation in Modern Setting.**

- Yogic therapies and modern concept of Yoga; Naturopathy, Hydrotherapy, Electrotherapy, Mesotherapy, Acupressure, acupuncture.
- Anatomy and Physiology and their importance in Yogic Practices.
- Food and Lifestyle: Basics of Ayurveda, Yogic Diet;
- Importance of having Sattvic Ayurvedic Food, Workplace productivity which is directly linked to Healthy Sattvic food.
- Modulation of ailments through food and balanced nutrition and dieting practices, integrating traditional food items with modern food habits, mental health and food types.

**Unit V Developing Happiness & Spiritual Quotient.**

- Happiness: Meaning and sources.
- Four hormones of happiness: Dopamine, Oxytocin, Serotonin, Endorphins.
- Happiness: independent variable vs. dependent variable, life view, models of happiness, Distinction between Religion and Spirituality.
- Myths about Happiness, Principles of being happy.
- Concept of Self; Positive thinking; Self Introspection; Religion and Spirituality; Life Stories of Spiritual Masters.
- Concept of Prana.
- Techniques of studying spiritual quotients.
- Applied Kinesiology: Introduction to the concept of Applied Kinesiology;
- Muscle Testing, Nutrient Testing.

**Practical Exercises:**

1. Participate in the practical sessions in Yoga Lab. on Asanas, Pranayama, Kriya: Sudarshan Kriya of Art of Living, Isha Kriya, etc.
2. Participate in the practical sessions in Yoga Lab. on Hatha Yoga, Raja Yoga, Laya Yoga.
3. Interpret the Yog Sutras by Patanjali as per their applicability in real life situations and submit a report of the same.
4. Submit and present report on their key learnings from the following:
5. Sudarshan Kriya yoga: Breathing for health–NCBI
6. How Meditation Benefits CEOs–A case study at Harvard Business School
7. A Little Meditating Helps You Make Better Business Decisions–A case study at
8. Harvard Business School.
9. Participate in simulation exercises in class where all learners are divided into two teams wherein, they have to debate for and against imbibing Ayurveda & health in modern lifestyle.
10. Participate in simulation exercises in class using applied kinesiology techniques.
11. Write a summary of their personal experience of learning various yoga, breathing and meditation techniques in the course and how you think it will help you in the future.

**Essential/Recommended Readings/Texts:**


1. Shankar, S. S. R., 2010, *25 Ways to Improve Your Life*, Bangalore: Sri Sri Publications Trust.
2. Shankar, S. S. R., 2010, *Ayurveda & Breath*, Bangalore: Sri Sri Publications Trust.
3. Taimni, I. K., 2005, *The Science of Yoga*, Adyar, Chennai: Theosophical Publishing House.
4. Verma, K., 2008, *Sri Sri Yoga*, Bangalore: Sri Sri Publications Trust.
5. Zope, S. A., & Zope, R. A., 2013, *Sudarshan Kriya Yoga: Breathing for Health*, *International Journal of Yoga*, 6(1), 4–10.
6. Shankar, S. S. R., 2018, *Patanjali Yog Sutra*, Bangalore: Sri Sri Publications Trust.
7. Vivekananda, S., 2019, *The Complete Book of Yoga: Karma Yoga, Bhakti Yoga, Raja Yoga, Jnana Yoga*, Delhi: Fingerprint! Publishing.

**Credits - 2**
**Hours - 30**

## VAC 18: Heritage Management

**Course Objectives:**

1. To provide students with a comprehensive understanding of the significance, classification and conservation of heritage in its tangible, intangible and natural forms.
2. To explore the role of heritage as a catalyst for development, particularly in the tourism sector, while emphasizing the importance of community participation and institutional frameworks.
3. To delve into the economic valuation of heritage, assessing both its direct and indirect impacts on society.
4. To equip students with knowledge of strategic and operational management practices essential for maintaining efficiency and effectiveness in heritage conservation.
5. To play the role of marketing in heritage management, focusing on segmentation, promotion, communication and networking strategies to enhance the visibility and sustainability of heritage sites.

**Learning Outcomes:**

After completion of the course, the students will:

1. Gain a clear understanding of various types of heritage and integrate Indian traditions into modern conservation and sustainability practices.
2. Analyze the role of heritage in sustainable development through tourism, community participation and ethical frameworks rooted in Indian knowledge systems.
3. Evaluate the economic value of heritage using both traditional Indian models and contemporary valuation methods.
4. Design effective management strategies for museums and heritage sites, incorporating principles from ancient Indian governance.
5. Apply marketing and communication strategies—blending traditional storytelling with digital tools—to promote heritage tourism and cultural industries globally.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 18 | Heritage Management | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Heritage and Its Significance.**

- Definition and Types of Heritage.
- Understanding Cultural Heritage and Its Importance.
- Global and National Heritage Frameworks: UNESCO Conventions and World Heritage Sites, Role of ICOMOS, ICCROM and other organizations, Indian heritage laws and policies.
- Heritage Conservation and Preservation: Concepts and Principles of Conservation, Techniques and Methods in Conservation, Challenges in Heritage Conservation.

**Unit II Heritage: An important incentive for Development.**

- Heritage as a Resource for Tourism.
- Cultural Tourism- Definition & Basic Elements.
- Different types of institutions- Eco-museums, Interpretation Centers, Econo-museums; Policy and Ethical.
- Considerations in Heritage Tourism; Role of Communities in Heritage Management; Heritage Education and Awareness; Legal & Institutional Frameworks.

**Unit III Economic Value of Heritage.**

- Values traditionally linked with culture, Economic values, Values related to Communication.
- Assessing the Economic Values of Heritage: Assessing Utility Value, Evaluation of Non-use Values, Evaluation of External Effects or Repercussions.
- Economic Evaluation of Heritage- some examples.

**Unit IV Strategic and Operational Management of Heritage Sites.**

- Efficiency & Effectiveness in Heritage Management.
- The need to broaden the concept of profit, The effective management of Heritage, Efficiency of Heritage Sites.
- Management of Heritage Sites: Options available among utility functions in the case of Museum.
- Management of Human Resources, Constraints faced by Management & institutional statute.

**Unit V Marketing Heritage.**

- Marketing & Heritage, Recognizing the need for Marketing.
- Marketing Techniques used for Heritage Sites.
- The advantages & limitations of segmentation.
- Networking & Marketing, Promotion & Communication.

**Practical Exercises:**

1. Select a local heritage site. Document its history, significance, current condition and conservation efforts. Prepare a short report with images and suggest strategies for its preservation.
2. Choose a heritage site and design a sustainable tourism model. Identify key stakeholders, propose visitor management strategies and include community participation. Present findings in a report or presentation.
3. Conduct a case study on a heritage site to assess its economic impact.
4. Develop an operational strategy for a museum or historical site. Present a SWOT analysis of the site's current management.
5. Create a marketing campaign for a heritage site or museum. Include segmentation, branding, digital marketing strategies and promotional activities. Design a social media plan and an event proposal to attract visitors.

**Essential/Recommended Readings/Texts:**

1. Allchin, B., Allchin, F.R. et al. (1989) Conservation of Indian Heritage, Cosmo Publishers, New Delhi.
2. Davis, P. (1999). Eco-museums, London.

3. Hooper-Greenhill, E (Ed) (1999). *The Educational Role of Museum,* London & New York.
4. Greffe, Xavier; *Managing our Cultural Heritage*; New Delhi: Aryan Books International,

Credits - 2
Hours - 30

## VAC 19: Mind Management

**Course Objectives:**

1. To build confidence and ability among the learners to cultivate mindfulness in their daily life.

**Learning Outcomes:**

After completion of the course, the students will:

1. Analyze and observe the modulations of the mind using Bharatiya and modern psychological principles to understand mental patterns and behaviors.
2. Evaluate the role of mindfulness, meditation and breathing techniques in managing stress, emotions and energy balance, ensuring development of self-discipline for holistic well-being.
3. Apply intelligence models, chakra activation and psychometric techniques to enhance cognitive abilities, emotional intelligence and overall mental effectiveness.
4. Develop strategies for effective communication, decision-making, resilience-building and trust cultivation, integrating mind management principles for workplace excellence.
5. Enhance self-awareness to achieve personal growth and professional success.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | |
| VAC 19 | Mind Management | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Introduction to Mind Management.**

- Importance of knowing the Mind, Understanding Thoughts and Emotions,
- Modulations of Mind by Maharishi Patanjali, Shad-ripu (Kaam, Krodha, lobha, Moha, Madh, Matsar):
- Causes and Cure, Peace of Mind: Luxury or Necessity;
- Managing Mind through breath.
- Mind Management: Efficiency, Effectivesness, Creativity and Excellence at Work (Yogah karmasu kaushalam)

**Unit II Mindfulness.**

- Mind and Stress, Components and Benefits of Mindfulness, Mindfulness Vs Meditation.
- Energy Centres in the body.
- Understanding stress and tools for reducing Stress: Yoga, Pranayama, Meditation and other Breathing Techniques.
- Different types of Meditation.
- Time Management, Anger Management.
- Mind: Doorway between Consciousness and Creation.

**Unit III Intelligences of Effective People.**

- Del Pe's 5 types of Intelligences: Instinctive, Emotional, Concrete Mental, Abstract Mental, Spiritual Intelligence, the connection of Chakras (Energy centres) and the respective intelligences, Concept and functions of Right Brain, Left Brain and the Frontal lobe.
- Gardner's Model of Multiple Intelligence: Naturalist, Musical, Logical-Mathematical, Existential, Interpersonal, Bodily-Kinesthetic, Linguistic, Intra-personal, Spatial.
- Techniques of understanding Competencies: Psychometric Testing.
- Enhancing Intelligence Quotient by activating Chakras.

**Unit IV Mind Management for Achieving Excellence.**

- Enrich your Communication; align yourself with the environment.
- Levels of Influence; Building Rapport; Cultivating Trust; Heal through Humour, Learning from Mistakes, Effective Decision Making.
- How to deal with Criticism; Being comfortable outside your Comfort Zone.
- Skills to build a positive environment at the workplace.

**Unit V Self-Assessment.**

- Practicing self-care, importance of having personal & professional goals: short term goals, medium term goals, long term goals.
- Goal of life, SMART Goals; Developing resilience and attitude of gratitude. Success in business.
- Measuring the Intelligence Quotient, Emotional Quotient, Dermatoglyphics Testing, Applied Kinesiology.

**Practical Exercises:**

The learners are required to:

1. Participate in simulation activity in class to demonstrate the modulations of mind. The learners should present a report discussing the situations from their real life where they encountered such modulations of mind and how they should deal with it.
2. Rate themselves on Emotional matrix highlighting where they wish to reach and deciding the time frame of the same. Each learner can identify a buddy to support them on their journey. After the completion of the exercise, each learner has to prepare the report of their success story.
3. Prepare a schedule of their daily activities and divide them into Four Quadrants.

*Analyse and present a report on:*

4. Time allocated to things which are not important. Time allocated in fulfilling the long-term objectives.
5. The present scenario (dasha) and future direction (disha) to be chosen.
6. Take online Psychometric Test available at: https://www.assessmentday.co.uk/psychometric-test.htm or from any other source. Analyse its outcome and present a report of key learnings from the same.
7. Perform Del Pe practical exercises daily: breathe 10 times focusing on each chakra.
8. Participate in role play exercise in the classroom to demonstrate the skill of using humour to heal.
9. Practice and demonstrate several types of yoga, pranayama and meditation in yoga Lab. Analyse your state of mind before and after the practice and present a report of the same.

10. Practice the technique of Applied Kinesiology to check his/her Intelligence Quotient, Emotional Quotient and Spiritual Quotient.
11. Practice and demonstrate meditation techniques to activate chakras. analyse its effect and write a report on the same.

**Essential/Recommended Readings/Texts:**


1. Pe, D. (2006). *8 types of leaders every leader should know*. MDP Global Resources.
2. Knight, S. (2009). *NLP at Work: The Essence of Excellence*. Boston: Nicholas Brealey Publishing.
3. Zohar, D. (2012). *Spiritual Intelligence: The Ultimate Intelligence.* London: Bloomsbury Paperbacks
4. Murphy, J. (2015). *The Power of Your Subconscious Mind*. Delhi: Fingerprint! Publishing.

Credits - 2
Hours - 30

## VAC 20: The Gita for Holistic Life

**Course Objectives:**

1. To illustrate the values from the Bhagavad Gita that contribute to a holistic life: physical, psychological, social and spiritual.
2. To help students relate to the wisdom in the Gita for overcoming challenges.
3. To develop clarity, purpose and the ability to achieve goals.

**Learning Outcomes:**

After the completion of the course, the students will:

1. Understand the core teachings and principles of the Gita for a holistic life.
2. Analyze the concepts of Dharma, Karma and Yoga.
3. Apply the teachings of the Gita in practice.
4. Develop leadership and decision-making skills.

**Credit Framework:**

| Course Code | Course Title | Credit Distribution of the Course | | | Credits |
|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/Practice | |
| VAC 20 | The Gita for Holistic Life | 02 | 0 | 0 | 02 |

**Details of Course:**

**Unit I Gita - Mentoring Your Life.**

- Know Thyself - Holistic Development (Panchakosha).
- Directing the Mind towards Dharma and Karma.
- Cultivating values for a blissful life -
  - Yoga (Yogah karmasu kaushalam).
  - State of Equanimity (Samattva yoga).
  - Equipoise (Sthitaprajna).

**Unit II Self-Management.**

- Qualities -
  - Satvika, Rajasika and Tamasika.
  - Good and bad conduct. (Daivi-Asuri Sampat).
- Modes of learning -
  - Shravana (Listening)
  - Manana (Reflection and questioning)
  - Nididhyasana (Assimilation of Knowledge)
- The field of action: Family and society.

**Unit III Dilemmas of Contemporary life.**

- Modern Day Arjuna.
- Finding Krishna as a Friend, Philosopher and Guide.
- Journey to Self-Discovery.

**Unit IV Three Modes of Navigation.**

- Action (Karmayoga).
- Knowledge (Jnanayoga).
- Devotion (Bhaktiyoga).

**Practical/Practice Component:**

1. Observe your friend in terms of health, behaviour, nature, intelligence and happiness using Panchakosha theory, suggest ways to bring improvement in the required areas.
2. Discuss about your Dharma as a student as well as a human being in class.
   i. Enlist ten daily activities that would lead you achieve your Dharma.
   ii. Make a list of your activities on a given day. Classify them as conducive or obstructive in your pursuit of your dharma.
3. Conduct a SWOC analysis for yourself and enlist best five of your Strengths, Weaknesses, Opportunities and Challenges. Also, suggest action plan to convert your weaknesses into strengths and to deal with the challenges.
4. Practice pranayama for 10-15 minutes daily for ten days or devote yourself to working for a selfless action for half an hour daily for ten days.
   i. Note your changes in your levels of patience, concentration and behaviour before and after the practice.
   ii. Share your experiences in an audio-visual presentation of about 5-10 minutes.
5. Make a list of the prominent qualities of your role model/friend. Classify these qualities as Sattvika, Rajasika or Tamasika.
6. Perform a role-play of Krishna-Arjuna dialogue in pairs, discussing dilemmas of contemporary life and your dharma in different situations.
7. Prepare a case study of yourself as a person facing the dilemmas of ethics, values and dharmas. Suggest the best possible action plan for yourself.

**Note**: Teachers may use the following verses of the Gita to facilitate unit-wise discussions in the classroom :-

Unit - I

1. Ch.2.19; 3.42
2. Ch.2.31, 38-39, 47-48
3. Ch.2.48, 50, 54-59

Unit - II

1. Ch.16.1-5
2. Ch.6.3
3. Ch.3.18-19

All references pertain to Srimadbhagavadgita Sankara Bhasya (Hindi), Gita Press, Gorakhpur.

**Essential/Recommended readings/Texts:**


1. Tilak, B. G. (1915). *Srimadbhagavadgita Rahasaya*. Poona: Tilak Brothers Publication.
2. Lal, R. B. (1970). *The Gita in the light of modern science*. Bombay: Somaiya Publications.
3. Sri Aurobindo. (2001). *Essays on the Gita*. Puducherry: Sri Aurobindo Ashram.

4. Gita Press. (2007). *The Bhagavadgītā or The Song Divine (With Sanskrit text and English translation)*. Gorakhpur: Gita Press.
5. Easwaran, E. (2011). *Essence of the Bhagavad Gita: A contemporary guide to yoga, meditation and Indian philosophy* (pp. 76–115, 134–149, 150–172, 173–218, 415–420, 476–500). Tomales, CA: Nilgiri Press.
6. गीताप्रेस। (2075 वि.सं.). *श्रीमद्भगवद्गीता: साधक-संजीवनी हिन्दी टीका*. गोरखपुर : गीताप्रेस।
7. https://ndl.iitkgp.ac.in/ndl

**Additional Resources:**

1. गोयन्दका, श्रीहरिकृष्णदासः, (2010), *श्रीमद्भगवद्गीता*, शांकरभाष्य अनुवाद सहित, गोरखपुर : गीताप्रेस।

श्रेयोऽङ्काः - 2
होराः - 30

## VAC 21: भारतबोधः

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतवर्षस्य भारतीयसंस्कृतेः च सामान्यपरिचयप्रदानम्।
2. वर्णाश्रमव्यवस्थायाः परिचयप्रदानम्।
3. भारतवर्षस्य सामान्यपरिचयप्रदानम्।
4. भारतीयसंस्कृतेः परिचयप्रदानम्।
5. प्राचीनशिक्षाव्यवस्थायाः परिचयप्रदानम्।

**अधिगमस्य परिणामाः (Learning Outcomes):** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. भारतवर्षस्य भारतीयसंस्कृतेः च सामान्यपरिचयं ज्ञास्यन्ति।
2. वर्णाश्रमव्यस्थायाः परिचयं ज्ञास्यन्ति।
3. भारतवर्षस्य सामान्यपरिचयं प्राप्स्यन्ति।
4. भारतीयसंस्कृतेः परिचयं प्राप्स्यन्ति।
5. भारतस्य प्राचीनशिक्षाव्यवस्थायाः परिचयं प्राप्स्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् ((Credit Distribution of the Course)) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/ Practice) | |
| VAC 21 | भारतबोधः | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. भारतवर्षस्य सम्प्रत्ययः।**

- आर्यावर्तस्य परिचयः।
- भारतवर्षस्य सम्प्रत्ययः।
- नामकरणम्।
- नामान्तराणां समीक्षा।

**अन्वितिः २. भारतीयसंस्कृतेस्तत्त्वानि।**

- धर्मस्य स्वरूपं लक्षणानि च।
- वर्णाश्रमव्यवस्था।
- प्राचीनदैनिकचर्या।
- भारतीयमहापुरुषाः।

**अन्वितिः ३. स्वास्थ्यसम्पादकाः विचाराः।**

- आयुर्वेदस्य परम्परा महत्त्वञ्च।
- योगस्यावधारणा जीवने तदुपयोगिता च।
- संस्काराः तेषां वर्तमाने प्रासङ्गिकता च।
- गीतायां मानवकल्याणम्।

**अन्वितिः ४. शिक्षा लिपयश्च।**

- प्राचीनशिक्षाकेन्द्राणि अध्ययनपरम्परा च।
- आधुनिकता संस्कृतं च।
- **"विश्वगुरुत्वेन भारतं"** - संस्कृतस्य भूमिका।
- लिपयः (ब्राह्मी, खरोष्ठी, पालि, प्राकृतम्)

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**

1. उपाध्यायः बलदेवः, (1978), *पुराणविमर्श*, वाराणसी : चौखम्बा विद्याभवन।
2. उपाध्यायः रामजीः, *भारतस्य सांस्कृतिकनिधिः,* सागरम् : संस्कृतपरिषद्, सागरविश्वविद्यालयः।
3. काणे, पी.वी., *धर्मशास्त्र का इतिहास,* लखनऊ : उत्तरप्रदेश हिन्दी संस्थान।
4. *श्रीमद्भगवद्गीता*, गोरखपुर : गीताप्रेस।
5. Institute of Distance Education. *Idea of Bharat*. Curriculum of BA History. First Semester (IDE-HIS-001-CC-1110). Arunachal Pradesh: Rajiv Gandhi University.

**सहायकाः ग्रन्थाः (Additional Readings)**

1. द्विवेदीः कपिलदेवः, *वैदिकसाहित्यं एवं संस्कृति*, वाराणसी : विश्वविद्यालयप्रकाशन।
2. उपाध्यायः बलदेवः, *संस्कृतसाहित्य का इतिहास*, वाराणसी : शारदाभवनप्रकाशन।
3. द्विवेदीः कपिलदेवः, *वैदिकसाहित्यं एवं संस्कृति*, वाराणसी : विश्वविद्यालयप्रकाशन।
4. द्विवेदीः कपिलदेवः, *भाषाविज्ञानं एवं भाषाशास्त्रः*, वाराणसी : विश्वविद्यालयप्रकाशन।
5. उपाध्यायः बलदेवः, *संस्कृतसाहित्य का इतिहास*, वाराणसी : शारदाभवनप्रकाशन।
6. उपाध्यायः रामजी, *भारतस्य सांस्कृतिको निधिः*, सागरम् : संस्कृतपरिषद्, संस्कृतविभागः, सागरविश्वविद्यालयः।

श्रेयोऽङ्काः - 2

होराः - 30

## VAC 22: श्रीमद्भगवद्गीतायां मूल्यानि

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयज्ञानपरम्परायां मूल्यानाम् अवगमनम्।
2. भारतीयसंस्कृतौ श्रीमद्भगवद्गीतायाः वैशिष्ट्यप्रतिपादनम्।
3. प्रस्थानत्रये भगवद्गीतायाः माध्यमेन मूल्यशिक्षावगमनम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. भगवद्गीतायाः वैशिष्ट्यं ज्ञास्यन्ति।
2. शाङ्करभाष्यस्य वैशिष्ट्यम् अवगमिष्यन्ति।
3. भारतीयशिक्षापद्धतौ मूल्यानां महत्त्वं ज्ञास्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रम कूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| VAC 22 | श्रीमद्भगवद्गीतायां मूल्यानि | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. द्वितीयाध्यायः शाङ्करभाष्यसहितः।**

**अन्वितिः २. तृतीयाध्यायः शाङ्करभाष्यसहितः।**

**अन्वितिः ३. द्वादशाध्यायः शाङ्करभाष्यसहितः।**

**अन्वितिः ४. पञ्चदशाध्यायः शाङ्करभाष्यसहितः।**

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. (1977), *श्रीमद्भगवद्गीता (शाङ्करभाष्यसहिता)*, मद्रास : समता प्रकाशन।

श्रेयोऽङ्काः - 2
होराः - 30

## VAC 23: मूल्यवर्धने सुभाषितानि

**पाठ्यक्रमस्य उद्देश्यानि (Course Objectives)**

1. भारतीयज्ञानपरम्परायां सुभाषितानां मूल्यावगमनम्।
2. भर्तृहरिप्रभृतीनां विशिष्टाचार्याणां कृतित्वविषयावगमनम्।
3. श्लोकमाध्यमेन मूल्यशिक्षाग्रहणम्।

**अधिगमस्य परिणामाः (Learning Outcomes)** अस्य पाठ्यक्रमस्य अध्ययनादनन्तरं छात्राः :-

1. सुभाषितपाठेन मूल्यशिक्षां ज्ञास्यन्ति।
2. नीतिशतकमाध्यमेन शिक्षाविषयकमूल्यम् अवगमिष्यन्ति।
3. विविधश्लोकस्पर्धासु आत्मविश्वासेन भागं ग्रहीतुं शक्ष्यन्ति।

**श्रेयोऽङ्कप्रारूपम् (Credit Framework)**

| पाठ्यक्रमकूटाङ्कः (Course Code) | पाठ्यक्रमशीर्षकम् (Course Title) | पाठ्यक्रमस्य श्रेयोऽङ्कविभाजनम् (Credit Distribution of the Course) | | | श्रेयोऽङ्काः (Credits) |
|---|---|---|---|---|---|
| | | व्याख्यानम् (Lecture) | अनुशिक्षणम् (Tutorial) | प्रशिक्षणम्/अभ्यासः (Practical/Practice) | |
| VAC 23 | मूल्यवर्धने सुभाषितानि | 02 | 0 | 0 | 02 |

**पाठ्यक्रमविवरणम् (Details of Course)**

**अन्वितिः १. समयोचितपद्यमालिका नीतिशतकं च।**

- सम्पूर्णं कण्ठस्थीकरणम् अन्वयार्थसहितम्।

**अन्वितिः २. वैराग्यशतकम्।**

- सम्पूर्णं कण्ठस्थीकरणम् अन्वयार्थसहितम्।

**अन्वितिः ३. स्पर्धार्थं श्लोककण्ठस्थीकरणम्।**

- अच्-वर्णानां दश-दश श्लोकानां कण्ठस्थीकरणम्।

**अन्वितिः ४. स्पर्धार्थं श्लोककण्ठस्थीकरणम्।**

- हल्-वर्णानां विंशति-विंशति श्लोकानां कण्ठस्थीकरणम्।

**निर्धारिताः ग्रन्थाः (Essential/Recommended Readings/Texts)**


1. श्रीगङ्गाधरकृष्णद्रविणः, (1927), *समयोचितपद्यमालिका*, मुम्बई : निर्णयसागरप्रेस।

2. प्रो. परमेश्वरनारायणशास्त्री डा. टी. महेन्द्र च, (2016), *बृहत्संस्कृतान्त्याक्षरश्लोकनिधिः*, नईदिल्ली : राष्ट्रीयसंस्कृतसंस्थानम्।
3. श्रीकृष्णमणित्रिपाठी, (2017), *नीतिशतकम्*, वाराणसी : चौखम्बासुरभारतीप्रकाशनम्।
4. श्रीजगन्नाथशास्त्री श्रीराधेलालशास्त्री च, *वैराग्यशतकम्*, वाराणसी : चौखम्बाविद्याभवनम्।

# परिसमाप्तिः

# End of the Document

***